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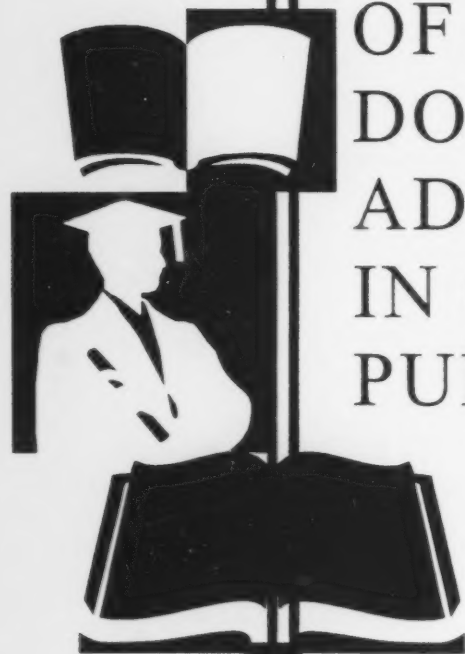
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ABSTRACT

The goal of this study was to describe the production and utilization of education doctorates in California public elementary and secondary education and to assess if there is a need for greater production of such degrees by higher education institutions in the state. An examination of relevant indicators and survey results revealed that, based on estimated supply and demand over the next decade, California will be able to maintain the current percentage of public school administrators who hold a doctorate. The number of doctorates in administrative positions has remained roughly constant over the last ten years (rising from 2,122 to 2,184), with California universities having produced approximately 450 doctorates per year. The stable number of doctorates employed is consistent with a retirement rate of about 100 doctorates per year and a rate of employment of new doctorates in the public schools of about 110 per year. A detailed analysis of supply and demand for education doctorates is included, along with a description of issues for further study and appendices containing numerous data tables and study materials. (EV)



THE PRODUCTION AND UTILIZATION OF EDUCATION DOCTORATES FOR ADMINISTRATORS IN CALIFORNIA'S PUBLIC SCHOOLS

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Summary

This report responds to Assembly Bill 1279 (Scott), legislation which directs the Commission to conduct a study on whether California is meeting its needs for persons holding a doctorate degree. The report focuses on the supply of and demand for persons holding doctorates in K-12 education. It includes the characteristics of education doctoral degree holders with regard to ethnicity, gender, and age and compares California with other states and the nation. It also identifies related policy issues that merit further examination. Working papers containing the supporting data and research instruments used for the study are included as Appendices to this report.

The Commission approved this report at its meeting of December 11, 2000. This report has been added to the Commission's Internet website -- www.cpec.ca.gov -- and is now electronically accessible to the general public. Additional copies of this and other Commission reports may also be obtained by e-mail at PublicationRequest@cpec.ca.gov; or by writing the Commission at 1303 J Street, Suite 500, Sacramento, Ca. 95814-2938; or by telephone at (916) 322-9268.

THE PRODUCTION AND UTILIZATION OF EDUCATION DOCTORATES FOR ADMINISTRATORS IN CALIFORNIA'S PUBLIC SCHOOLS

*A Report in Response
to Assembly Bill 1279*

CALIFORNIA POSTSECONDARY EDUCATION COMMISSION
1303 J Street ♦ Suite 500 ♦ Sacramento, California 95814-2938





COMMISSION REPORT 00-9
PUBLISHED DECEMBER 2000

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Purpose, Background, Scope and Methodology of the Study

Purpose Assembly Bill 1279 (Chapter 337 of the Statutes of 1999) called upon the California Postsecondary Education Commission (CPEC) to conduct a study of the capacity of higher education institutions located in California to produce sufficient professionals with applied joint doctoral degrees to meet the present and future needs in the State.

Responding to this legislative mandate, the Commission formed an advisory committee to assist in the study. The committee advised on the preliminary study design, potential survey instruments and work plan. It also met to review the entire study, including conclusions, options and recommendations (see Appendix M for a list of the committee members).

The Commission also retained the services of an independent consultant, Bill Furry, to assist staff in conducting the study over a period of six months, beginning in April 2000.

Role of the Commission

The Commission is charged with the planning and coordination of postsecondary education in the state, including the review and concurrence or non-concurrence on proposed new academic degree programs in public higher education. These responsibilities include the review and concurrence of doctoral programs proposed by the University of California or the University of California and the California State University and the approval of joint doctoral programs between the California State University and independent institutions. To date, the Commission has concurred in or approved 19 doctoral programs.

The Commission issued a report in 1987, entitled: *The Doctorate in Education, Issues of Supply and Demand in California* (87-11). It examined the history and status of doctoral degrees and doctoral degree programs in education in relation to the potential supply of, and demand for, holders of these degrees in California. The report focused on the broad question of whether or not additional doctoral programs in educational administration were needed in California. The following recommendations resulted from the 1987 study:

1. No new doctoral programs in educational administration be established in any institution not then offering the degree. Recognizing that some efforts were underway to plan new programs, including joint doctoral programs, which respond to issues of access and equity, the Commission recommended that any such programs be developed

to reflect concerns for such issues and concern for the quality, content, and effectiveness of existing programs.

2. An intersegmental committee investigate the needs and propose possible structures, components, and modes of delivery for doctoral programs designed specifically for present and future administrators in California's Community Colleges.

**Scope and
methodology
of the study**

Although AB 1279 called for a broad study of applied joint doctoral programs, the Commission, after consulting with the author and the advisory committee, structured the study to more accurately reflect the intent of the author in the following ways:

1. The scope was broadened to include the Ph.D. in Education as well as the Ed.D., because it was believed the State must consider and include in the research design, every potential resource for meeting the demand for educational leaders with doctoral degrees.
2. The study was limited to the needs in California's public schools and does not address the supply of and demand for education doctorates in community colleges, four-year colleges and universities, private schools and universities or business and industry.
3. The study was expanded to review single-campus doctoral programs as well as joint doctoral programs, since both types of programs produce doctoral degrees that supply the need for educational leaders in California.

In an effort to understand the current production and utilization of the education doctorate, and therefore to understand the projected supply and demand ratio, a number of indicators were examined:

- ♦ National trends in the production of doctorates in education from 1981 through 1998 were analyzed. The trends are broken down by gender, ethnicity, and the specific field of specialization. The Survey of Earned Doctorates, a review conducted by the National Opinion Research Center at the University of Chicago, provided the national data used in this study.
- ♦ Characteristics of education doctorates in California during the same time frame were examined closely, broken down by the same data elements used in the national data.
- ♦ Production and characteristics of education doctorates in California were compared with those of the nation.
- ♦ Employment of persons holding doctorate degrees in the public schools of California was examined, including data on the number of doctoral degree holders, and the characteristics of their employment, ethnicity, and gender. The source of this information was the Califor-

nia Basic Educational Data System (CBEDS) for the fall of 1998, the most recent year available.

- ♦ The level of employment of education doctorates in California public schools was compared with that in five other states that are comparable in size and diversity (Florida, Illinois, New York, Pennsylvania and Texas).
- ♦ Indicators of school-district demand for persons with a doctorate, such as salary increments, bonuses for superintendents, district programs to encourage staff to attain the doctorate, and the trend in applications to doctoral programs were examined.
- ♦ Survey questionnaires were completed by elementary and secondary education (K-12) superintendents, community college presidents, superintendents, and chancellors, deans of the California State University Schools of Education, and deans of the education units of public, independent, and private colleges and universities that offer doctoral programs in education.

As a result of the aforementioned research activities, this report contains a comprehensive analysis of the supply of and demand for education doctorates in California's public schools. It presents primary findings and identifies a number of related issues that merit further examination. Working papers containing the supporting data and research instruments used for the study are included in Appendices A through L.

Although the focus of the study is the K-12 public schools, surveys were also sent to community college presidents, superintendents and chancellors to gauge their responses on a variety of questions. The views of these chief executive officers are presented in this report as well.

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Findings of the Study

THE GOAL OF THIS STUDY is to describe the production and utilization of education doctorates in California public elementary and secondary education and to assess if there is a need for greater production of such degrees by higher education institutions in the State. The basic public policy question is whether California postsecondary institutions now produce sufficient doctorates to meet current and future needs in the public elementary and secondary (K-12) education system.

Findings based on study results

Based on estimated supply and demand over the next decade, the Commission concludes that California will be able to maintain the current percentage of public school administrators who hold a doctorate. The number of doctorates in administrative positions has remained roughly constant over the last 10 years (rising from 2,122 to 2,184), with California universities having produced approximately 450 doctorates per year. The stable number of doctorates employed is consistent with a retirement rate of about 100 doctorates per year and a rate of employment of new doctorates in the public schools of about 110 per year.

However, this Commission report, despite its narrow focus on supply of and demand for doctorates in public education, suggests a need for a larger public-policy perspective related to the various aspects of doctoral education in California. Although overall production of education doctorates is sufficient to accommodate existing and future demand for doctorates in the State's public schools, if current levels of employment are accepted, a number of other important issues emerged that merit serious consideration.

Further study or action needed

In this section, the Commission raises nine questions about the production of education doctorates and the need for persons who hold such degrees and includes conclusions and suggestions for further study or action.

- 1. With elementary and secondary school reform movement leading to higher expectations for education leaders, should the State encourage school districts to employ more doctorates, and should institutions of higher education be encouraged to give priority admission to candidates who plan to work in the public schools?** Only a quarter of the education doctorates produced in California in 1998 will be working in the public elementary and secondary schools. The Commission found that, of approximately 160 searches for school superintendents over the last four years in California, not one district required that the new top educational leader hold a doctorate. Further, school boards rarely provided incentives such as salary ad-

justments or financial bonuses to promote the attainment of the doctoral degree in their districts.

The Commission urges school districts and institutions of higher education to work together in determining whether or not priority admission should be provided to candidates who plan to work in the public schools. Further, the Commission urges school districts to consider encouraging attainment of the doctoral degree through incentives or position requirements.

2. **Does the content of doctoral degree programs meet the needs for tomorrow's education leaders?** Superintendents who were surveyed frequently mentioned that there exists a need for doctoral programs that emphasize a practical knowledge base, including such areas as instructional methods, school finance, the politics of education, statistical analysis methods, school law, and project management. In fact, acquisition of broad-based knowledge is frequently mentioned by practitioners as the most important product of doctoral programs, even ahead of leadership skills.

The Commission urges California's public and independent colleges and universities to support increased emphasis on program curricula that meet the needs of leaders for management and organizational skills as well as policy understanding based on theory and practice. Additional support should be provided to enable closer collaborative relationships between various stakeholders in the content of the doctoral programs so that the content is responsive to current and future needs.

3. **Can alternative training programs provide high quality educational experiences, particularly for education leaders in rural areas and small districts?** The findings of this study indicate that smaller school districts and rural regions tend to have fewer doctorates employed than larger, urban and suburban areas of California.

The Commission urges higher education institutions to make doctoral programs more accessible to education leaders in rural areas. In addition, alternative training opportunities through administrative credential programs, education specialist programs, and courses focused on specific topics should be made available. These goals could be implemented through the use of distance learning programs.

4. **Should the supply of, and demand for, faculty with doctoral degrees in the teacher and administrator training programs of California's four-year colleges and universities be examined?** This study did not focus on the needs of the four-year universities for persons who hold an education doctorate, but several of the deans of the State university schools of education gave unsolicited reports of shortages of education faculty with appropriate doctorates.

The Commission suggests that a study be undertaken of the supply of and demand for faculty with an education or other appropriate doctorate in the California universities' schools of education.

5. **Are programs accessible and affordable to aspiring educational leaders who desire to go into the field of education?** Data from the current study note the large number of education doctorates that are produced by the State's private sector. In 1998, private colleges and universities produced more than two-thirds of all education doctorates in the State. The value of the private sector cannot be over-emphasized when one considers the vital role these institutions play in California's professional and workforce development. Of equal importance is the role played by the public institutions, given the mission of the State University and the University of California to meet statewide needs in preparing educational leaders.

The Commission urges the State to examine program accessibility to ensure that education doctoral programs are available to all students, regardless of economic means or geographic limitations.

6. **What can be done to address the ethnicity and gender disproportion of education doctorates as measured against their population in the State?** There has been a major increase in the production of doctorates -- 75 percent -- earned by underrepresented students in California over the past two decades. However, the proportion of minority candidates is very low as measured against their population in the state. With regard to gender disproportion, in 1998 males received only half as many education doctorates as females, with male education doctorates declining by almost 40 percent in the last 20 years. In the future, the prevalence of education doctorates among females who hold administrative positions will almost certainly exceed that of males.

The Commission recommends that the public and private institutions of higher education in California undertake aggressive efforts to encourage admission to and successful completion of doctoral programs by ethnic minority and male candidates.

7. **Should institutions of higher education be looking more closely at the need for doctorates in specialized fields?** Production of doctorates in many traditional educational specializations has been flat or declining over the past decade. The fields of educational psychology and testing, measurement and assessment are examples of such occurrence. With increasing importance being given to individual student, school, and district performance on standardized exams, school leaders need strong analytic skills in these areas to identify and address the weaknesses in their programs. Based on the findings in this study, it appears that there is an unmet need for more doctorates in educational psychology and testing, measurement and assessments.

The Commission urges further investigation into areas where there may be a greater need in order to quantify its magnitude and develop approaches to foster increased production of doctorates in such specializations if necessary.

8. **Can it be presumed that there is value added in the attainment of doctoral training?** There is virtually no systematically collected evidence that the "leadership training" offered in educational administration/leadership doctoral programs has an impact on administrator behavior, or that it results in improved organizational or student performance. In addition to ensuring that the substance of the programs is related to desired outcomes, more attention needs to be given to evolving knowledge and skills required to address issues administrators face. Furthermore, the study and comments by several respondents suggest that the linkage between administrative behavior, institutional effectiveness, and student performance requires more attention in these programs.

The Commission believes that better understanding of these programs is called for and urges a comprehensive study examining the impact of doctoral training on administrative behavior, school operations, and student learning.

9. **Do community college administrators and instructors have access to appropriate doctoral programs?** This study found that doctorate degree programs for California Community Colleges' administrators were scarce, with 60 percent of the community college chief executive officers indicating that there is no doctoral program in community college administration/leadership within a reasonable commuting distance of their campus. (Although the needs of community college leaders were not the focus for this study, information gleaned from surveys sent to presidents, superintendents and chancellors provided information on a variety of issues.)

The Commission suggests that continued work is needed to identify the training needs of community college administrators and to determine the types of programs needed to address the range of their needs.

3

Analysis of Supply and Demand for Education Doctorates in California's Public Schools

THIS SECTION presents an analysis of the capacity of California higher education institutions to produce sufficient education doctorates for the State's public schools. It contains the primary data and analysis upon which the Commission based its findings. It also includes selected results of the survey questionnaires used in the study. Complete documentation of the study findings is included in the study's working papers which are available upon request.

Maintenance of the education doctorate workforce in the public schools

In an analysis of employment-related supply and demand, it is customary to define demand as the number of qualified workers that employers are willing and able to hire at a point in time at the prevailing market wage.¹ Thus, current demand in the public schools for administrators who hold a doctorate is, by definition, the number of administrators who hold a doctorate who are employed in K-12 school districts.² The question addressed in this section is whether the production of education doctorates will be sufficient in the future to meet current demand; that is, to maintain the administrator doctorate workforce at its current level.³

Demand. Several factors work to deplete the doctoral workforce, retirement being the principal reason. Other reasons include departures for jobs in other fields before reaching retirement age, and deaths. In this study, the focus of the analysis of supply and demand is on retirements, which account for the vast majority of doctoral departures from the K-12 workforce.

Current demand can be measured in terms of absolute numbers (in 1998-99, there were about 2,184 administrators in the public schools who held a doctorate), or in terms of the percentage of all administrators in the public schools. To project the demand for doctorates based on the percentage

¹ T. Bikson, et.al., *The Labor Market for Attorneys in the State of California: Past, Present, and Future*, The Rand Corporation, DRU-2236-UC, February, 2000.

² There are entities other than school districts that provide services for the benefit of K-12 pupils which employ persons with education doctorates. Data collection in this regard was beyond the scope of the project. It is likely that these persons are a relatively small number compared to the number employed by school districts (including county offices of education).

³ It is not known exactly in which disciplines administrators received their doctorates, but our survey of school superintendents indicates that 93.7% of those who have doctorates have them in education.

of the administrative workforce, it is necessary to also project the number of administrators in the public schools. This was done based on enrollment, as recommended by Gifford, et.al., in a 1986 study of the need for education doctorates.⁴

Based on data availability, it is necessary to make two key assumptions in the calculation of retirements by doctorates: First, because retirement rates by age are available by salary level and not by educational attainment of administrators, it is assumed that the retirement rates of persons employed in the public schools who earn \$70,000 or more annually is the retirement rate of persons with education doctorates. Second, it is assumed that historic retirement rates by age will continue in the future -- an assumption that is subject to the possibility of changes in retirement benefits in an era of state surpluses. (Age distribution data were obtained from the California Department of Education and retirement rates were obtained from the State Teachers Retirement System.)

Applying the retirement rates to the age distribution and projecting the rates through future years, it is possible to estimate the number of retirements by year of administrators who hold a doctorate, as shown below (Display 3-1):

DISPLAY 3-1 New Doctorates Needed to Maintain the Level of Doctorates in the Public School Administrative Workforce

Year	(1) Number of Doctorates Retiring	(2) Additional Doctorates for Enrollment Growth	(3) = (1) + (2) Total New Doctorates Needed to Maintain Percentage Rate
2000-01	59	7	66
2001-02	70	24	94
2002-03	79	18	97
2003-04	90	14	104
2004-05	99	15	114
2005-06	100	13	113
2006-07	107	8	115
2007-08	111	6	117

Thus, to maintain the number of doctorates at the level existing in 1998-99 (2,184), new doctorates must enter the public school system annually as administrators (or, existing administrators must attain the doctorate) as estimated in column (1) of the above Display 3-1.⁵

⁴ B. Gifford, et. al., Meeting the Need for Educational Leadership by the University of California: A Proposal for President David P. Gardner by the Deans of the Graduate Schools of Education, April, 1986.

⁵ In the 1987 study of education doctorates by CPEC, three alternative estimating procedures produced maintenance requirements of 73, 101, and 107 annually.

A simple linear equation was developed relating the number of public school administrators to total statewide enrollment and that equation was applied to the Department of Finance K-12 enrollment projections through 2007-08. The number of "growth" doctorates required each year is shown in the second column of Display 3-1. To maintain the percentage of administrators who hold a doctorate at the same level as it was in 1998-99 (9.1%), additional administrators who hold a doctorate would have to be employed in the public schools each year as shown in the third column of Display 3-1.

Supply. Supply is the number of otherwise qualified education administrators who hold a doctorate who are willing to work for a school district employer at a point in time at the prevailing market wage. Supply can be estimated as follows:

1. It is assumed that the production of education doctorates by California institutions continues through the next eight years at the average level for 1997-98, 1998-99, and 1999-2000. This number is 490.
2. From this number, the number of persons with temporary visas who return to a foreign location upon graduation must be subtracted. Based on data from the Survey of earned doctorates, roughly 5 percent of the new doctorates have temporary visas and roughly 75 percent of these return to a foreign location. Thus 5 percent of 490 times 75 percent = 18, and $490 - 18 = 472$.
3. Some persons from California earn the doctorate in other states and return to work here. Based on information from the 1998 Survey of Earned Doctorates, of 208 persons who earned education doctorates in all other states combined and went to high school in California, 59 percent planned to return to California. Thus, 59 percent of 208 = 123, and $472 + 123 = 595$.
4. It is not known how many persons who earn an education doctorate in California will leave the state.
5. Based on the record for the doctoral class of 1998 in California, approximately 28 percent, or 167 out of 595, will be employed in public elementary and secondary education.⁶ It is not known how many of these doctorates will be working in private schools.

Therefore, the 167 doctorates produced per year who are willing to work in the public schools at the prevailing wage exceeds the roughly 100 to 110 needed to maintain the proportion of administrators in the system

⁶ Table 4-4 in the working papers for this report shows that 21.2% of the graduates of 1998 from California institutions had definite plans to work in K-12. However, about 30% of the new doctorates either did not indicate where they planned to work, or did not reveal any plans at all (work or postdoctoral study). These unknowns were prorated between work and study, and between the different types of employing organizations shown in Table 4-4, resulting in the estimate used here of 28%.

with doctorates. However, not all these new doctorates will remain in California and not all will take formal leadership positions. Doctorates in School Psychology, Teaching Fields, Special Education, and Counseling & Guidance who work in public schools may not have leadership roles. Thus, the 167 must be reduced by some unknown amount. Even if this total is reduced by 25 percent, it appears there would be sufficient production to maintain the level of doctorates in the system. Other sources of doctorates, which could not be estimated, include: (1) persons with doctorates who are working currently in the private sector, but who are seeking employment in the public schools; and (2) persons with doctorates who are working currently in other states, but who wish to work in California.

Increased production over the next eight years has not been included in the figures given above. Mills College has 30 students enrolled in its Education Leadership program which started in 1999. Saint Mary's College of California is scheduled to begin its doctoral program in Education Leadership in 2000. More than half a dozen other independent colleges plan to bring new doctoral programs online between 2002 and 2005. UC Riverside is planning a new joint-doctoral program involving eight California State Universities, and the University of San Diego, and San Diego State University will soon inaugurate a new joint-doctoral program. Finally, many of the existing programs have the capacity to increase production.

Based upon estimated supply and demand over the next decade, the Commission found that California will be able to maintain the current percentage of public school administrators who hold a doctorate. New State initiatives will not be necessary to achieve this percentage.⁷

The potential for increased demand for doctorate holders in the public schools

However, it must be asked whether demand for doctorates in education is rising. The key questions are: (1) Do school boards and superintendents want more persons who hold an education doctorate working in their schools and central offices? and (2) Do the institutions of higher education need to produce more doctorates to meet increasing demand? The findings of this study suggest strongly that demand is not rising and, hence, there is no need to foster the production of a greater number of doctorates annually to meet rising demand. This section examines the evidence.

The classic indicator of increasing demand for a resource is rising prices. If school district employers wanted to hire more doctorates than they already have, there would be evidence of increasing wages tied to the possession of a doctorate. This study has found virtually no increases in

⁷ The number of doctorates in administrative positions has remained roughly constant over the last ten years (rising from 2,122 to 2,184) while IHEs have produced about 440 doctorates per year. The stable number of doctorates employed is consistent with a retirement rate of about 100 and a rate of employment of new doctorates in the public schools of about 25%.

wages for doctorates over the last five years among the public schools of California (and it is expected that this stagnation has existed for a much longer period). Two-thirds of the school districts do not offer any supplemental wage for the possession of a doctorate. Those schools that offer a stipend provide a nominal amount (\$1,000 per year being the mode) that is more likely an artifact of traditional salary negotiations with the teachers union than a policy intended to reward or attract doctorates or to encourage their development internally. To summarize, the wage data indicate there is little competition among school districts to attract personnel who hold doctorates.

There may be bureaucratic and political obstacles that prevent school boards from using money to attract leaders who possess a doctorate in education. However, these obstacles would not prevent a board from adopting a policy requiring that the district's chief executive officer, its head of curriculum and instruction, and its deputy superintendent with operational responsibility for all aspects of the school program, hold doctorates. This study looked closely at the educational attainment that school districts of all sizes around California require of newly hired administrators.

The Commission found that, of approximately 160 searches for school superintendents over the last four years, not one district required that the new top educational leader hold a doctorate. It was not surprising, then, to find that in no case was the head of curriculum and instruction, compensatory education, special education, school psychology, or any other central office function required to possess a doctorate. These findings support the view that demand for doctorates in the public schools is not rising.

Perhaps school boards value doctorates highly but do not want to limit the pool of candidates for administrative positions by requiring the doctorate. If this were the case, two things would be evident: First, relatively high value would be given to the doctorate in assessing candidates and in the ultimate hiring decision. And second, programs within districts to encourage and support employees in attaining the doctorate would be established. This study examined both these possibilities.

Relative value of the traditional education doctorate. It was the general consensus among the people interviewed who are knowledgeable about the hiring process in the public schools that the value of the education doctorate has declined over time relative to the value of other qualities. Change in the composition of school boards, the emergence of the "diploma mill," and the perception of lack of rigor in schools of education (a perception held by some deans as well as consumers of the degree) have contributed to the devaluation of the doctorate.

In addition, another factor is the shift of power over many aspects of schooling (particularly over revenues, but best illustrated by the imposi-

tion of categorical programs and State mandates) from the local entity to the state level. This has resulted in the need for a superintendent who can operate politically at the State level—in the capitol and in statewide education associations.

The standards movement is another important influence on the qualities desired today in educational leaders. Proven success articulating, planning, and carrying-out improvements in instructional programs is now more important than any other quality. School boards also look closely at district needs in assessing administrator candidates—for example, a rapidly growing district will want to hire a superintendent who can manage a complex construction program; a district with a diverse population, ethnically and linguistically, is going to look for a superintendent who can be successful in just such a complex environment.

In sum, the Commission found that school boards are looking for new leaders who have demonstrated success, have broad experience, fit the needs of the district, and have good interpersonal skills to work effectively with the board, subordinates, and the community. As a result, the candidate with a doctorate alone faces stiff competition in the public schools today.

On the other hand, perhaps a good candidate with a wealth of experience who performs well on the job could be an even more effective leader and facilitator of student learning if he or she has a doctorate. If governing boards believed this, perhaps they would establish programs to support and encourage employees to acquire an Ed.D. or a Ph.D. In the random survey of superintendents, the Commission found, however, that 85 percent of the districts across the state have no program to foster acquisition of a doctorate. Examination of what constituted the “program” in the 15 percent of districts that provide one revealed that in most cases it was the nominal doctoral stipend that was described earlier.

This study reveals that programs to promote the doctorate in school districts are extremely rare. The lack of programs to promote the doctorate is another strong indicator of a lack of increasing demand for persons who hold the degree.

Finally, waning demand for administrators who have an Ed.D. or Ph.D. is illustrated by the declining percentage of public school administrators holding either degree. In 1984-85, approximately 12.7 percent of public school administrators held a doctorate degree. In 1990-91, the percentage was 10.2 percent. In 1995-96, the percentage was 9.9 percent, and in the most recent year for which data is available, 1998-99, the percentage has dropped to 9.1 percent. These findings contribute to the conclusion that demand for doctorates in the public schools is not increasing. Again, absent any change in current conditions, there is no reason for California to adopt policies to promote an increase in the production of doctorates in education based on rising demand for “doctoral resources.”

**Assessing
whether
public schools
should have
more
leaders who
hold a
doctorate**

An important and difficult question is whether California public schools should employ more leaders who hold a doctorate. Perhaps demand for doctorates is weak because school board members, parents, community leaders, teachers, and pupil services personnel are simply unaware of the qualities (the knowledge, skills, and abilities) that a person with a doctorate brings to the job by virtue of attaining the highest advanced degree. This section attempts to address this issue by first examining existing research concerning the impact of doctorates on school operations and student achievement.

Evidence from Research. Unfortunately, review of the available literature yields little about the impact of administrator preparation programs on the performance of the public schools. In an extensive review of the literature on the effectiveness of administrator preparation programs, Miklos (1992)⁸ found that the research "is fragmented, few questions are pursued in depth, and patterns in results are difficult to discern." Assessments of the effectiveness of preparation programs are usually based on reported participant satisfaction, or on surveys of practicing administrators about their opinions of the adequacy of their training.

In 1999, Shakeshaft⁹ wrote that there is "certainly no evidence that schooling and achievement, however measured, are related to anything we do in preparation programs in education administration."

McCarthy (1999)¹⁰ concluded her comprehensive review of the development of leadership preparation programs with these observations:

A number of gaps are apparent in the information available on educational leadership units and preparation programs. Most significantly, there is insufficient research documenting the merits of program components in relation to administrator performance. Do preparation programs actually achieve their asserted purpose of producing effective leaders who create school environments that enhance student learning? . . . Adequate justification has not been provided for mandatory graduate preparation for one to lead a public school in our nation . . . similar preparation is not required for individuals to lead other large organizations, agencies, and corporations. Data are needed to either justify the expense of such education or suggest that resources be directed elsewhere.

⁸ Miklos, E. "Administrator preparation, educational," in M. C. Aikin (Ed.), *Encyclopedia of Educational Research*, 6th edition, pp 22-29, McMillan, 1992.

⁹ Shakeshaft, Charol, "A Decade Half Full or a Decade Half Empty, Thoughts from a Tired Reformer," in Joseph Murphy and Patrick B. Forsyth (Eds.), *Education Administration in a Decade of Reform*, p. 237, Corwin Press, 1999.

¹⁰ McCarthy, Mary, "The Evolution of Educational Leadership Preparation Programs," in Joseph Murphy and Karen Seashore Louis (Eds.), *Handbook of Research on Educational Administration*, 2nd edition, p. 133, Jossey-Bass, 1999.

The lack of research linking doctoral programs to the quality of school operations and student achievement is understandable because of the extreme complexity of the subject—there are simply too many variables to control to isolate the impact of preparation programs. If research to-date is of no guidance, how else might the need for more doctorates in administrative positions in the public schools of California be assessed? In the following subsections this question is addressed from a variety of perspectives.

Production of doctorates in California and the nation. If it were the case that schools of education across the nation were expanding their production of education doctorates, and that this expansion appeared to be a secular trend, it might be an indication of widespread rising demand in the public schools for employees who hold a doctorate. Put another way, if the rest of nation is increasing its production of education doctorates, perhaps California should do so as well. This study has found, however, that national production has declined significantly over the past 20 years (down 15%).¹¹

Enrollment per doctorate. Another national characteristic which might suggest that California needs to increase its production of education doctorates is enrollment per doctorate produced.¹² Public K-12 enrollment per doctorate awarded is much higher in California than in the nation as a whole, and it grew significantly more here than in the nation during the last decade. From 1988 to 1998, there was a 17.1 percent increase in enrollment per new doctorate in California compared to a 9.9 percent increase in the nation. This occurred because, even though the growth of doctorates was greater in California than in the nation during the period, enrollment increased 28 percent in the state but only 16 percent in the nation. In 1998, there were 14,685 K-12 students for every doctorate produced in California compared to 9,438 in the nation.¹³ This finding might suggest that California would want to increase its annual production of education doctorates to match the increased enrollment. Again however, the Commission found no evidence of rising demand in the public schools for doctorate holders as a result of enrollment increases.

Employment of doctorates in the public schools of California compared to that in comparable states. An indicator that might suggest the conclusion that California increase its production of education doctorates would be a higher prevalence of doctorates among school district administrators in comparable states. This study compared California to Florida, Illinois, New York, Pennsylvania, and Texas in terms of the percentage of

¹¹ If the study had revealed a strong national increase in the supply of education doctorates, this fact would have been thoroughly investigated to determine whether it actually stemmed from an increase in demand by public school employers.

¹² We could also look at enrollment per doctorate employed in the public schools. But the number of doctorates employed is not available nationally.

¹³ The validity of this comparison assumes that about the same percentage of education doctorates take employment in elementary and secondary school in the nation as do in California.

incumbents who hold a doctorate in the positions of superintendent, central office administrator, high school principal, elementary school principal, and other school-site administrator. These states are, in many respects, comparable to California in size, ethnic and cultural diversity, and income distribution. In over all numbers, California ranks above Florida and Texas and below Pennsylvania, Illinois, and New York.

The number of doctorates per 1000 administrators in the selected states is shown below (Display 3-2):

DISPLAY 3-2 Doctorates per 1,000 Administrators in Selected States

<u>State</u>	<u>Number of Doctorates per 1000 Administrators</u>
Pennsylvania	173
Illinois	134
New York	99
CALIFORNIA	91
Florida	61
Texas	58

Other findings, broken down by position, include:

- ♦ California has a lower percentage of incumbents who hold a doctorate than Illinois and Pennsylvania in all administrative positions -- superintendent, central office administrator, high school principal, elementary school principal, and other school-site administrator.
- ♦ California has substantially more doctorates in central office positions than New York (13.3 versus 9.4%), but trails that state in all the other administration categories.
- ♦ California leads Florida in doctorates in the positions of superintendent, central office administrator, and high school principal. But California has a lower percentage of doctorates than Florida serving as elementary school principals and other site administrators.
- ♦ California has a higher percentage of persons who hold a doctorate than Texas in all administrative categories.

It is difficult to determine from these data whether California should be seeking to produce and employ more doctorates. It would be helpful to know what the employment trend has been in these other states—in California it has been down for the last 15 years as pointed out earlier -- however, that information is not readily available for other states. If California were at the bottom of this list, it might suggest a deficiency of doctorates in this state.

Given the limited information available, however, the employment rate is not a useful indicator of the need to produce more doctorates for administrative positions in the public schools.

**Results of
surveys
of educational
leaders**

Another way to assess whether the public schools should employ more administrators who hold a doctorate is to solicit the opinions of those who are most informed about the knowledge, skills, and abilities of public school administrators. Therefore, public school superintendents, deans of CSU schools of education, and deans of schools of education in institutions of higher education that produce education doctorates were asked whether California needs more superintendents, principals, and central office administrators who hold a doctorate in education.

Need for More Superintendents and Principals Who Hold a Doctorate. The percentage of respondents in each category surveyed who indicated a high need (a rating of 4 or 5 on a scale of 1 to 5) for more doctorates in education in the positions of superintendent and principal are shown below (Display 3-3). The views of superintendent respondents are broken out between small districts (< 2,500 enrollment) and larger districts (> 2,499 enrollment), and between superintendents who hold a doctorate and those who do not.

DISPLAY 3-3 Views of the Need for More Doctorates in Education in the Positions of Superintendent and Principal

	Percentage of Respondents Indicating High Need (4 or 5 on scale of 1 to 5)					
	Small District Superintendents		Larger District Superintendents		Deans of Doctoral Programs	CSU Deans of Education
	No Doc	Have Doc	No Doc	Have Doc		
Superintendent	12%	84%	10%	72%	77%	95%
Principal	0%	55%	4%	38%	65%	84%

The responses can be summarized as follows:

- ♦ Deans of doctoral programs, California State University (CSU) deans, and superintendents who hold a doctorate are, for the most part, in agreement that California needs more superintendents who possess a doctorate.
- ♦ Superintendents who do not hold a doctorate (in both larger and small districts) see little need for more superintendents who have a doctorate.
- ♦ The perceived need for more principals with a doctorate in education is less for all groups of respondents than the indicated need for more superintendents to have a doctorate.

Views of superintendents of the importance of having a doctorate. Another view of the issue is the importance given by superintendents to having a doctorate in educational administration/leadership for doing a good job in an administrative position. Those results are shown below (Display 3-4):

*DISPLAY 3-4 Views of Superintendents of the Importance of
Superintendents and Principals Having a Doctorate*

Percentage of Superintendents Giving a High and Low Importance Rating

	<u>Low Rating (1 and 2)</u>		<u>High Rating (4 and 5)</u>	
	<u>Small Districts</u>	<u>Larger Districts</u>	<u>Small Districts</u>	<u>Larger Districts</u>
Superintendent	40%	20%	32%	70%
High School Principal	61%	39%	9%	27%
Elementary Principal	77%	54%	5%	14%

These responses can be summarized as follows:

- ♦ Small-district superintendents are much less likely to think that having a doctorate in education administration/leadership is very important for doing a good job as a superintendent or principal than larger-district superintendents.
- ♦ The importance for principals is seen as substantially less than for the superintendent.

As was found with respect to the need for more doctorates, there is a difference between the views of superintendents who hold a doctorate and those who do not:

- ♦ Half of those who do not have a doctorate rated it unimportant that a person have a doctorate in education administration/leadership for doing a good job as a superintendent, while 90 percent of those who have the advanced degree gave it a high rating for importance.
- ♦ The difference between those with and without a doctorate is less with respect to the importance of a doctorate for principals. Less than half of superintendents who held a doctorate gave high ratings to importance for high school principal, and only 20 percent rated importance high for elementary school principal. None of those without a doctorate gave high ratings of 4 or 5 to importance for a high or elementary school principal.

In sum, significant majorities of CSU deans, deans of institutions of higher education that award doctorates, and superintendents who hold a doctorate indicate a need for more education doctorates among superintendents and principals in the public schools. On the other hand, superintendents who do not have a doctorate, who presumably see themselves as doing a good job without it, see little need for more doctorates in the positions of superintendent and principal.

In terms of importance of the doctorate in education administration/leadership for doing a good job, none of the subgroups (small and larger districts, those with and without a doctorate, and combinations of these two variables) gave high ratings for either high- or elementary-

school principals. However, larger-district superintendents and those with a doctorate gave high ratings to the importance of having a doctorate in education administration/leadership for doing a good job as a superintendent. These findings suggest the knowledge, skills, and abilities imparted by doctoral programs are needed more by superintendents than by principals.

The preceding observation about principals is corroborated to some extent by findings concerning the benefits of alternative training for principals. In response to a question regarding whether there are professional development programs available for principals that provide training as beneficial as a doctoral program in education administration/leadership, 46 percent of larger-district superintendents responded affirmatively, 45 percent responded negatively, and 9 percent did not know. Most small-district superintendents (88%) responded affirmatively, and 69 percent of the small-district superintendents who hold a doctorate answered affirmatively. However, only 35 percent of the larger-district superintendents who hold a doctorate supported the view that alternative training is available to principals that is as beneficial as a formal doctoral program in education administration/leadership.

Benefits of Doctoral Training for Superintendents and Principals.

Those respondents who indicated a high need for more doctorates in the positions of superintendent and principal were asked to explain why. The objective was to gain an understanding of perceptions of the "value added" by doctoral training. This subsection presents the benefits of doctoral training, as perceived by superintendents, deans of institutions of higher education that award doctorates, and deans of CSU schools of education.

- ◆ *Superintendents* indicated that the benefits of doctoral training were the following, in order of most frequent mentions: (1) symbolic value (credibility and respect as a basis for leadership), (2) general knowledge base, (3) leadership skills, (4) analytical skills, and (5) upgrade of the profession. The importance of the symbolic value is underscored by responses to another question in which superintendents were asked to compare the symbolic value of doctoral training to the value of the training itself: 48 percent responded that the symbolic value exceeded the training value, and 77 percent indicated that the symbolic value is equal to or greater than the training value.
- ◆ *Deans of institutions of higher education that award doctorates in education* emphasized three benefits of doctoral programs (in no particular order of importance, which was not possible to discern): (1) knowledge of teaching and learning; (2) the ability to analyze data and relate research to practice, and (3) leadership skills that can be applied to improve instruction. The most persuasive statement of need for a doctorate in education was as follows: "Administrators and other school leaders need to (1) use theory and research consistently

as an essential component in decision making; (2) understand teaching and learning in depth; (3) view organizational structures and cultures as mechanisms through which to lead; and (4) direct and interpret program evaluation and research."

- ♦ *Deans of California State University schools of education* (which institutions provide much of the credential training for administrators in California) indicated the following benefits of doctoral training, essentially in order of importance: (1) Leadership skills to lead change, reform, and instructional improvement, including skills in inter-group dynamics, community relations, knowledge of the politics of education, and knowledge of organizational theory; (2) the ability to understand research methods and the implications of high quality research, to conduct "action research" on existing problems, and to carry out program evaluation and assessment; (3) understanding of curriculum, learning theory, and instructional methods; and (4) the ability to command respect and to act professionally and ethically.

As can be seen, there is considerable congruence in the views of the three groups about the benefits of doctoral programs. However, without research to substantiate that doctoral students actually acquire these skills and that they are effectively applied in practice, it is unclear whether these are statements of goals or actual descriptions of the knowledge, skills, and abilities imparted by doctoral programs.

Careful review of the comments and responses of superintendents and others discloses a set of rewards that doctorates acquire independent of the content (and perhaps even of the quality) of the training program. It could be argued that these benefits of doctoral training, as outlined below, are sufficient to warrant the expansion of production in California. These are:

- ♦ Credibility and respect in the school district;
- ♦ Sense of satisfaction -- self-confidence and courage -- a foundation for leadership;
- ♦ Exposure to new theories, concepts, and techniques -- intellectual growth;
- ♦ Friends, contacts, and networks (who can be sources of advice and solutions to problems); and
- ♦ Respect for research -- less acceptance of the conventional wisdom without rigorous examination.

The findings in this section indicate that there are large numbers of deans and superintendents who think California needs more persons who possess a doctorate in the ranks of superintendents and principals. The outcomes and benefits of doctoral training have been summarized as accu-

rately as possible from the comments of the respondents. Taken as a whole, the views of superintendents, deans of CSU schools of education, and deans of institutions of higher education that award doctorates offer strong arguments in favor of expanding production of doctorates to be employed in California's public schools in the positions of principal and superintendent.

The Need for More Central Office Administrators Who Possess a Doctorate in Education. In the surveys, superintendents were asked to indicate the administrative positions (or roles, which is more appropriate for small districts) in which California needs more persons who hold a doctorate. The percentage of superintendents who gave a high rating (a 4 or 5 on a scale from 1 to 5) to the importance of having more incumbents of specified positions possess a doctorate are shown below (Display 3-5).

DISPLAY 3-5 Superintendents' Views of the Importance of Having More Doctorates in Specified Positions or Roles in the Public Schools

Administrative Position	Larger Districts	Administrative Position	Small Districts
	Percent High Importance		Percent High Importance
Deputy Superintendent	65%	Head of research and evaluation	44%
Associate Superintendent	60	Deputy Superintendent	33
Head of research & evaluation	58	Associate Superintendent	24
Head of curriculum & instruction	45	Head of curriculum & instruction	20
Head of staff development	32	Head of staff development	13
Head of pupil services	26	Head of special education	7
Head of staff personnel	25	Head of compensatory education	7
Head of special education	24	Head of staff personnel	6
Head of finance/business	16	Head of pupil services	6
Head of bilingual education	16	Head of bilingual education	0
Head of compensatory education	14	Head of finance/business	0

As shown, superintendents of small districts see it as much less important to increase the number of incumbents in these positions (or roles) who possess a doctorate than do superintendents of larger districts. Second, the high ranking given to Head of Research and Evaluation by both groups of superintendents is noteworthy, though not surprising, and particularly interesting in the case of the small-district superintendents. Finally, it should be pointed out that generally low percentages (less than a

third in many cases) of superintendents ascribe high importance to increasing the number of doctorates for many positions.

In the surveys, Deans of California State University schools of education and of institutions of higher education that award doctorates in education were asked to prioritize the need for doctorates in various educational specializations.

DISPLAY 3-6 Dean's Views of the Priorities for the Production of Education Doctorates

Deans of Doctoral Programs		CSU Deans		CSU Deans Priorities for New Joint-Doctoral Programs	
Ed. A/L	50%	Ed. A/L	89%	Ed. A/L	93%
C & I	40	C & I	47	Spec. Ed.	56
Ed. Psych	27	Ed. Psych.	47	C & I	47
Teach Fd	21	Sch. Psych.	24	Teach Fd	29
Spec. Ed.	20	Spec. Ed.	18	S/P Found	18
C & G	13	Teach Fd.	13	Ed. Psych	12
Sch. Psych.	13	C & G	12	Sch. Psych.	12
Adult	0	Adult	6	C & G	12
S/P Found	0	S/P. Found	6	Adult	6

Additional Specializations Mentioned by:

Deans of Doctoral Programs: Urban Education, Multicultural Education, Instructional Leadership, Language and Literacy, Staff Development, Testing and Assessment.

CSU Deans: Reading/Literacy (2), Business Administration, Communications, Ethics, Higher Education Administration, Instructional Technology, Urban Educational Leadership.

CSU Deans' Joint-Doctoral Priorities: Reading/Literacy (3), Educational Technology (2), Assessment and Program Evaluation, Mathematics Teaching Field, Rehabilitation Counseling, Urban Educational Leadership.

There is substantial agreement between the California State University deans and the deans of doctoral programs about high- and low-priority needs among the educational specializations. As for priorities for new joint-doctoral programs, CSU deans give Special Education a high priority (56% of the deans indicated new joint-doctoral programs in this field are a top priority), and a surprisingly low priority to Educational Psychology (only 11.8% of the deans gave a top priority ranking to Educational Psychology). Priorities in the establishment of new joint-doctoral programs depend on many factors -- particularly on the qualifications and interests of the faculty -- but there appears to be a significant divergence between the high importance given to the need to increase employees in the public schools who have been trained in Educational Psychology (ranked second in importance with Curriculum & Instruction) and the relatively low priority given to this specialization for the establishment of new joint-doctoral programs.

From these data, it is evident that a great majority of deans of both California State University schools of education and institutions of higher education that offer doctorates are of the opinion that the public schools need more doctorates. In addition, it is obvious that when the ratings of four and five are combined, the need is focused on three specializations -- Educational Administration/Leadership, Curriculum & Instruction, and Educational Psychology. There is also some emphasis on the need for more doctorates in Teaching Fields and particularly in the specialization of Reading.

The Commission's findings support the view that, in terms of the needs of the public schools, California's institutions of higher education should expand production of education doctorates in the identified specializations.

**The content
of doctoral
programs
in education
administration/
leadership**

The view that California needs more persons in administrative positions who hold a doctorate in Education Administration/Leadership requires an understanding (or perception) of the knowledge, skills, and abilities that doctoral programs impart to their participants. The argument for increased production is weakened if there is disagreement among authorities about what the goals of doctoral programs should be, or if there is incongruity between what the producers of doctorates in Education Administration/Leadership say their programs impart and what knowledgeable practitioners and observers say should be imparted.

In the Commission's surveys, superintendents and CSU deans of schools of education were asked to identify the five most important skills, abilities, areas of knowledge, and experiences that a doctoral program in Education Administration/Leadership *should* provide its participants. Deans of such doctoral programs, on the other hand, were asked to identify the five most important skills, abilities, areas of knowledge, and experiences that their programs actually impart to their doctoral candidates. The results are summarized below (Display 3-7).

DISPLAY 3-7 Content of Doctoral Programs, Top Five Content Areas by Respondent Group

Superintendents
of Small Districts

Change Agent skills
Leadership skills
Knowledge of School Finance
Knowledge of Instructional Methods
Knowledge of Politics of Education

Deans of
Doctoral Programs

Leadership of Diversity
Leadership skills
Practical Dissertation

Superintendents
of Large Districts

Change Agent skills
Knowledge of Org. Theory
Leadership skills
Communication skills
Leadership of Diversity*

CSU Deans of
Schools of Education

Leadership of Diversity
Change Agent skills
Leadership skills

DISPLAY 3-7 Continued

Knowledge of Org. Theory
Clinical Practice

Knowledge of Org Theory
Knowledge of Ed. Politics**
Communication skills**

*Capacity to provide leadership in an organization characterized by diversity

**Equal

The findings can be summarized as follows:

- Superintendents of large school districts and CSU deans of schools of education have very similar views of what doctoral programs should provide, both giving heavy emphasis to leadership skills.
- Cluster analysis of the CSU deans' responses revealed three slightly different emphases within the leadership framework: (1) A doctoral program in Education Administration/Leadership that focuses on "Instructional Leadership" and includes "Knowledge of instructional methods and related research" which the other CSU subgroups do not include; (2) a program that emphasizes practical leadership skills; and (3) a program that emphasizes theoretical knowledge of organizational dynamics, completion of a discipline-based dissertation, and leadership skills.
- The deans of doctoral programs indicate that their programs have an emphasis on the leadership skills desired by large-district superintendents and the CSU deans. However, the deans of institutions of higher education that produce doctorates also give high importance to completion of a practical dissertation and "clinical practice involving field-based problem solving." Cluster analysis did not reveal distinct subgroups, but showed that several individual programs had different emphases from the great majority.
- Small-district superintendents differ from large-district superintendents in that they want knowledge in the specific areas of instructional methods, school finance, and the politics of education.
- Cluster analysis within the large-district superintendents revealed two distinct subgroups: (1) A group of 56 superintendents who desire heavy emphasis on leadership skills in a doctoral program in Educational Administration/Leadership; and (2) a group of 36 superintendents who want greater emphasis on the knowledge base, particularly knowledge of instructional methods, school finance, organizational theory, and the politics of education.
- Superintendents give little emphasis to completing a dissertation as an important part of a doctoral program in Administration/Leadership. Also, except for one subgroup, the California State University deans do not give high importance to the dissertation. However, half of

deans of doctoral programs consider the dissertation one of the five most important elements of their doctoral programs.

In reviewing this section, many superintendents share a consistent view with California State University deans, and to a lesser extent with the deans of doctoral programs, of what a doctoral program in Education Administration/Leadership should consist. However, it is also apparent that significant numbers of large-district superintendents and most small-district superintendents want a doctoral program that emphasizes, in addition to leadership skills, knowledge in specific areas -- school finance, instructional methods, the politics of education, and organizational theory—which are program elements that appear to be of lower priority to the deans. There is considerable variation among doctoral programs in what they offer, and priority for some elements does not mean that inadequate attention is given to other elements. However, a program in Educational Administration/Leadership that does not offer instruction in the areas of knowledge that have been mentioned will not be satisfactory to some participants.

**The need for
more education
doctorates in
specific
situations**

This study has examined the prevalence of doctorates in terms of a variety of characteristics including school district size and location, gender, ethnicity, age of doctorates, and others. This section assesses the need for more doctorates in specific situations.

Gender. In the early 1980s the gender trend lines crossed for production of education doctorates in California. Since at least 1983, more female education doctorates have been produced annually than male doctorates. In 1998, 278 women were awarded an education doctorate, while only 135 males received the degree. California has not been unique in this regard. Nationally, from 1981 to 1998, the production of male doctorates declined by 38 percent, while in California production fell 35 percent from 1978 to 1998. During the same periods, production of female doctorates increased 20 percent in the nation and 53 percent in California.

In terms of the occupants of administrative positions, this study has shown that in 1998, among superintendents, a slightly higher percentage of females have a doctorate than males, among central office administrators, substantially more males have a doctorate, and among principals, slightly more males have doctorates. However, for both principals and central office administrators, there are more females who hold a doctorate than males because there are significantly more female incumbents in these positions.

In the future, the prevalence of doctorates among females who hold administrative positions will grow to exceed that of males. If equality between the genders is a goal, then clearly California needs to encourage more males to obtain the degree.

Ethnicity. There has been a major increase in the production of ethnic-minority education doctorates in California over the past twenty years. In California, the number of ethnic minorities earning an education doctorate increased by 75 percent between 1978 and 1998—this compares to a national increase of 26 percent between 1981 and 1998. At the same time, national production of white doctorates declined 21 percent, but in California the output of white education doctorates fell only 2.4 percent. In 1998, there were 284 education doctorates awarded to whites and 117 to ethnic-minorities. Thus, despite the increase over the last 20 years, ethnic minorities in California in 1998 received disproportionately fewer education doctorates.

In terms of the incidence of doctorates among position incumbents, there was rough equality in 1998 across ethnicities in the position of superintendent, except that there were fewer Asian superintendents who held a doctorate (32% compared to the statewide total of 47.6%). (It should be noted that the issue of the number or percentage of administrative positions held by ethnic minorities, while important, is a different issue from the one addressed here.)

In central office administrative positions, there was substantial variation across ethnicities in 1998. Again, attention is drawn to the relatively low percentage of Asians (6.9%) in central office administrative positions who held a doctorate.

There was also considerable variation in 1998 across ethnicities in the prevalence of doctorates in the position of principal. In this case, Asians have a higher percentage of doctorates than the other large ethnic groups—perhaps reflecting more recent entrance into the doctoral system by persons from Southeast Asia. Hispanic principals who held a doctorate were relatively few compared to the other large ethnic groups.

In summary, the relative incidence of doctorates among minorities in administrative positions is mixed. Most minorities who attain the positions of principal or superintendent are about as likely as whites to hold a doctorate. In the central office administrative positions, members of the large minority groups are less likely than whites to hold a doctorate.

Gender Within Ethnicity. The California production figures outlined above mask significant differences between genders within ethnicities. Significant trends have occurred within Asian, Hispanic, African American, and White groups, as shown in Display 3-8:

DISPLAY 3-8 *Production of Education Doctorates, Gender Within Ethnicity*

Ethnicity	Percentage Change, 1978 to 1998	
	Males	Females
African American	-19%	+56%
Asian	0	+50
Hispanic	+25	+500
Whites	-42	+44

As can be seen, large percentage increases have occurred in the production of female doctorates, particularly in the case of Hispanic women, while the percentage of male African American and White doctorates have declined. However, the numbers for the minority groups are very small (the increase for Hispanic women is from six to 30, that for African American women is from 16 to 25, that for Hispanic men is from 12 to 15, and the decline for African American males is from 16 to 13). The decline for White males is large, from 153 to 89. Conversely, the increase for White women is large, from 135 to 194.

From 1998 data, it can be argued that there is a need for the production of more ethnic-minority education doctorates, based on disproportionality with their population in the state and on lower rates of possession of the doctorate in central office administrative positions. In addition, few minority male doctorates were produced in 1998 compared to minority females, and compared to majority males and females.

Age of Doctorates. The ages of recipients of education doctorates in California and the nation are relatively high when compared to recipients in other academic and professional fields. In California, in 1998, 46 percent of the education doctorates were awarded to persons over 45 years of age. Only 20 percent of doctorates were received by persons under 36 years of age and only 5 percent were under 31 years old. Of those persons in public school administration who already hold a doctorate degree, only 576 (28%) of the 2,034 were under the age of 50.

Growth and decline in the production of doctoral specializations

Previous decades have witnessed a shift in the education specializations offered by institutions of higher education. In California and the nation, there has been a shift from traditional specializations, such as Counseling and Guidance, Special Education, Adult and Continuing Education, Educational Psychology, and Curriculum and Instruction, to Education Administration/Leadership and to specializations with new names such as Multicultural Education and Education Policy. The changes for California from 1988 to 1998 and for the nation from 1981 to 1998 are shown below (Display 3-9).

DISPLAY 3-9 *Percentage Change in Doctorates Awarded in Selected Specializations, California and the Nation*

<u>Specialization</u>	<u>California 1988-1998</u>	<u>Nation 1981-1998</u>
Administration/Leadership	+47%	+23%
Curriculum & Instruction	-15	+4
Testing, Measurement, & Assessment	-100 (from 9 to 0)	+13
Educational Psychology	-20	+6
School Psychology	+75 (from 4 to 7)	+24
Counseling and Guidance	-64	-53
Special Education	-53	-25
Adult & Continuing Education	-100 (from 3 to 0)	-30
Pre-Elem., Elem., Secondary	--- (from 0 to 5)	-58
Higher Education	-35	-36
Teaching Fields	+19	-38
Social/Philosophical Foundations	+78	-34
Education, General	-49	-49
Education, Other	+45	+77

The percentages shown above can be somewhat misleading in particular instances because there are considerable fluctuations between years in the production of doctorates in individual specializations. Nevertheless, in California the trend has been either flat or declining for all traditional specializations except Education Administration/Leadership which has grown sufficiently to result in an 8.9 percent overall increase in education doctorates from 1988 to 1998.

The decline in doctorates in Educational Psychology and Testing, Assessment, and Measurement has occurred at a time when interest in achievement, as measured by standardized tests, has grown rapidly and new programs have been established linking awards, sanctions, and even graduation to performance on statewide exams. The opinions of superintendents and deans that the public schools need more persons with expertise in educational psychology and research and evaluation, plus the financial rewards and penalties that have been attached to performance, suggest there is a need for the institutions of higher education to produce more doctorates in these two areas.

Curriculum and Instruction and the Teaching Fields have suffered over the years--production has been essentially flat during the 1990s, while public school enrollments have grown 28 percent (the 19% increase for Teaching Fields represents an increase from 21 doctorates in 1988 to 25 doctorates in 1998). For the same reasons that indicate a need for the production of more doctorates in educational psychology, plus the ongoing efforts in California to reform methods of reading instruction, the Commission finds that an increase in the production of specialists in curriculum and instruction and in selected teaching fields would be appropriate.

**Shortage of
education
doctorates in
small school
districts and in
certain regions
of California**

Based on 1998-99 data, it was observed that the larger the school district, the more likely the superintendent would possess a doctorate degree. It was also found that small districts in the Central Valley, the rural parts of Northern California, and the rural mountain regions are less likely to have a superintendent who holds a doctorate than small districts in the urban part of Southern California and in suburban areas. Furthermore, Central Valley, the rural parts of Northern California, and the rural mountain regions had significantly fewer county office of education superintendents who hold a doctorate than other regions in the state.

In general, large districts tend to have more doctoral resources than smaller districts. Display 3-10 shows that doctoral resources are strongly related to district size.

DISPLAY 3-10 Central Office Administrators with Doctorates by Size of District, 1998-1999

<u>District Size</u>	<u>Number of Districts</u>	<u># of Central Office Administrators with Doctorate</u>	<u># of Central Office Administrators with Doctorate Per District</u>
< 2,500	495	32	0.07
2,500-4,999	134	82	0.61
5,000-9,999	134	158	1.18
10,000-19,999	87	195	2.24
20,000-39,999	57	170	2.98
40,000 +	13	142	10.92
County Offices	58	173	2.98

The study also addressed the question of the prevalence of principals who hold a doctorate in various regions of the state. It was found that Southern California has a higher percentage of principals who hold a doctorate than other regions, and that the Central Valley and the rural parts of Northern California have the lowest percentages. However, the Central Valley and the rural mountain regions have significantly higher percentages of high school principals who hold a doctorate than elementary schools principals.

This subsection clearly shows that smaller districts and rural regions tend to have fewer "doctoral resources" than larger districts and the urban and suburban areas of California. Equalization of doctoral resources (if this were a policy goal) would probably not be achieved by simply increasing the statewide production of education doctorates, even if the increase were large in percentage terms. Furthermore, it has been found that superintendents in small districts look favorably upon alternatives to doctoral programs in the training of principals, and that what they want in a doctoral program, in addition to leadership training, is instruction in specific topics such as instructional methods, school finance, organizational

theory, and the politics of education. The Commission's findings suggest that courses focused on specific topics, perhaps delivered by the latest telecommunications technology, might help the rural areas acquire the "doctoral resources" that they lack.

**Who employs
holders of
education
doctorates**

Based on 1998 data, it is estimated that only about 28 percent of each doctoral class produced in California seeks (or continues to) work in the public schools. Additional research is needed to verify this finding, to explain it, and to understand variation among institutions of higher education in where their graduates find employment. It has been noted that a number of comments were made by deans of CSU schools of education about a need for more education doctorates to teach in the California State University system. Additional research is needed to understand the competition for doctorates among educational systems—especially since it has been well established in this study that the K-12 public school districts have not shown an interest in competing financially to attract leaders who hold a doctorate.

An important finding in this study is that a relatively small percentage of education doctorates actually go to work in elementary and secondary education.

**Survey results
for California
Community
Colleges**

The Chief Executive Officers (CEOs) of all community colleges and districts were sent a survey questionnaire concerning the prevalence of doctorates in administrative positions in the California Community Colleges. The views of Superintendents, Presidents, and Chancellors on a variety of issues related to the doctorate are presented here.

Educational Attainment of Chief Executive Officers. Approximately 83 percent of CEOs in the community colleges possess a doctorate. Of those with a doctorate, 72 percent (including Ph.D.s and Ed.D.s) earned the degree in education, while 28 percent have a doctorate in a discipline other than education. The advanced degrees have been earned at 45 universities across the nation, with the University of Southern California accounting for the most (over 7%).

Importance of the Doctorate. The CEOs were asked a number of questions about the importance of the doctorate for community college administrators. Findings are as follows:

- The CEOs indicated that they acquired their doctorates for job advancement and promotion, intellectual growth, personal satisfaction, and acquisition of organizational and leadership skills. Of lesser importance were societal and community expectations, salary increase, and career field change. Five of the CEOs said they were currently enrolled in, or planning to enroll in, a doctoral program. These five gave essentially the same reasons for pursuing the doctoral degree as those who already possess it.

- Of the 13 CEOs who do not hold a doctorate and do not plan to attain one, the primary reason for not pursuing the degree is lack of time. Six CEOs indicated some concern about the proximity of a doctoral program. For five CEOs, proximity was "not important at all."
- Only 66 percent of the CEOs who hold a doctorate responded that the degree was "essential" for securing their current position. Thus, about one-third indicated it was only "very helpful" or less important. While 83 percent of White males said possession of the degree was essential for securing their current position, only 22 percent of African Americans, 50 percent of Asians, 54 percent of Hispanic males, and 61 percent of women agreed with this assessment.
- CEOs were asked how important the doctoral degree was in carrying out their job responsibilities. Overall, 75 percent said the degree was "essential" or "very helpful" in doing their job, but 47 percent of those with a Ph.D. in a discipline other than education ascribed low importance, saying the degree was "somewhat" or "minimally" helpful. An interesting difference emerged between those who hold a Ph.D. in education and those who hold an Ed.D. Of those with a Ph.D., 94 percent found their degree "extremely" or "very helpful," but only 76 percent of those with an Ed.D. in education gave the same high ratings.
- CEOs were asked about the expectations in their districts with respect to the possession of a doctorate by key administrative leaders, and they were asked whether they thought the positions should be expected to be held by persons who hold a doctorate. Only 50 percent of the CEOs indicated their districts expected Vice-Presidents for Instruction to hold a doctorate, and even fewer, 32 percent, said their districts expected the Vice-President for Student Services to hold a doctorate. The CEOs, however, had higher expectations than their districts, 70 percent indicating that VPs for Instruction should have a doctorate, and 55 percent saying that VPs for Student Services should be expected to hold a doctorate.
- CEOs were also asked what type of doctorate was preferable for each of the key leadership positions (an Ed.D. in education, a Ph.D. in education, or a Ph.D. in another discipline). As shown below (in Display 3-11), nearly half the respondents think that all three types are equally preferable. Another 25 percent prefer a doctorate in Higher Education (either an Ed.D. or a Ph.D.). About 10 percent prefer an Ed.D. in Higher Education, zero to 9 percent (depending on the position) prefer a Ph.D. in Higher Education, and 7 to 11 percent (depending on the position) prefer a Ph.D. in another discipline.

DISPLAY 3-11 *Preferred Type of Doctorate for Position*

<u>Position</u>	(1) Ed.D. In Higher Education	(2) Ph.D. in Higher Education	(3) (1) & (2) Equally Preferable	(4) Ph.D. in a Discipline Other than Education	(5) (1), (2), & (4) Equally Preferable
District Chancellor	10.4	9.4	25.5	7.5	46.2
Campus President	11.5	8.7	25.0	7.7	46.2
VP/Dean of Instruction	10.0	5.0	26.0	11.0	48.0
VP/Dean Student Services	10.4	4.2	28.1	9.4	47.9
Deans of Occupational/ Vocational Ed.	13.2	0.0	22.4	7.9	56.6

- CEOs were also asked to compare the symbolic value of the doctorate versus the training value. The vast majority (80%) responded that the symbolic value is of equal or greater value than the training.
- Finally, CEOs were asked how important it is for purposes of advancement in community college administration, that a doctorate be from a regionally accredited institution rather than from a non-accredited IHE. Nearly all (85%) of the respondents indicated that it was "extremely" or "very" important that the degree come from an accredited institution.

Prevalence of Doctorates in Community College Administration. An attempt was made in this study to conduct an inventory of doctorates in community college administrative positions. Because of certain limitations in the method used to collect the information, the results cannot be viewed as a precise inventory. However, the data for Chief Instructional Officers (CIOs) and Chief Student Services Officers (CSSOs) are the most accurate.

It was found that many of the key leaders in the community colleges do not have a doctorate. The percentages who do not hold a doctorate are shown below (Display 3-12):

DISPLAY 3-12 *Percent of California Community College Key Leaders Not Holding a Doctorate*

<u>Position</u>	<u>Number of Incumbents Identified in the Survey</u>	<u>Percentage Not Holding a Doctorate</u>
Chief Instructional Officer	78	44%
Chief Student Services Officer	74	54
Chief Administrative Officer	38	72
All Others Identified as Vice-Presidents	47	53
Deans and Directors	619	62
Total	857	60

Perceptions of Supply and Demand. The majority of Community college CEOs believe that the demand for community college administrators with "an appropriate doctorate" exceeds the supply of such persons. The majority (51%) think that demand "greatly exceeds" or "exceeds" supply, while only 14 percent think supply "greatly exceeds" or "exceeds" demand. Very few (only 2.8%) of the CEOs hold the view that supply "greatly exceeds" demand. About one-third indicated that supply and demand are "in balance."

Analysis of the data reveals that CEOs with more administrative experience tend to see demand exceeding supply (Display 3-13).

DISPLAY 3-13 Perception of Supply and Demand for Doctorates in Community College Administration by Years of Experience as a Community College Administrator

<u>Years as Administrator</u>	<u>Number of CEOs</u>	<u>Percentage Who Responded That:</u>	
		<u>Supply and Demand are in Balance</u>	<u>Demand "Greatly Exceeds" or "Exceeds" Supply</u>
Less than 13	19	42.1	36.9
13 to 18	23	39.1	47.8
19 to 21	22	31.8	50.0
22 to 27	22	22.7	59.1
More than 27	21	19.0	61.9

Availability of Training. Questions about the availability of training for community college administrators elicited the following responses:

- Sixty percent of the CEOs said there is no doctoral program in community college administration/leadership within a "reasonable commuting distance" of their campus.
- Only 12 percent indicated that a program in community college administration was available at the closest CSU campus, and 14 percent said they did not know if CSU training was available.
- Nearly one-third (31%) responded that training in a program in community college administration/leadership was available at the nearest UC campus, and 13 percent said they did not know if UC training was available.
- Forty-one percent said that training was available at the closest independent, accredited institution of higher education, but 21 percent did not know if training was available at an independent institution.

Alternatives to Formal Doctoral Training. The CEOs were asked whether other forms of professional education could further the development of community college leaders as effectively as a formal doctoral program. Overall, more than half (56.4%) of the CEOs think that there is

no good substitute for a doctoral program. However, it is interesting to note that more than 40 percent think other forms of training can be as effective. This is not surprising in light of views of the importance of the symbolic value versus the training and the disagreement over what type of doctorate is most appropriate.

Several subgroups of CEOs have a view that is different from that of the overall majority. The key observations here are:

- As would be expected, CEOs who do not have a doctorate are much more likely than degree holders to find value in alternative forms of training—two-thirds of them responded YES, while 61 percent of those who hold a doctorate responded NO.
- Those with the least administrative experience and those with the fewest years since receiving the doctorate (presumably, the younger CEOs) are more likely to see value in alternative forms of training.

**Summary
findings about
community
colleges**

The view of the doctorate in community college administration provided by the CEOs is a confusing and complex picture. It includes a surprisingly low percentage of key leaders who hold a doctorate and low general expectations for possession of the degree, mixed views of the type of doctorate that is preferable, emphasis on the symbolic value of the degree over its training value, some reluctance to admit that alternative forms of training would be as effective as a formal degree program, and the belief that demand for doctorates exceeds supply. Additionally, many reported that access to doctoral programs focused on community college administration is limited and indicated that community college-related administrative training at nearby institutions is often not available (or its availability is unknown).

This picture suggests that the advanced training of community college administrators is an undeveloped discipline. There appears to be broad discrepancy among community college administrators about the type of degree or training that is most valuable. The various opinions include: (1) a doctorate in a discipline other than education, (2) a practical Ed.D. in higher education, (3) a research oriented PH.D. in higher education, or (4) extensive practical training (perhaps including an "MBA" in community college administration) in specific fields such as legal issues, fiscal management, labor relations, and marketing. Thus, if one assumes that key community college leaders need additional advanced training, the question may be what institutional arrangements will best meet the needs of both potential and current community college leaders.

Appendix A

National Trends in the Production of Doctorates in Education

In this chapter we examine national trends in the production of education doctorates from 1981 through 1998. The data include gender, ethnicity, and field of specialization of doctorate recipients. The source is the Survey of Earned Doctorates conducted by the National Opinion Research Center at the University of Chicago.¹ The fields of specialization are as follows:

- Curriculum and Instruction
- Education administration
- Educational Leadership
- Educ./Instruct. Media Design
- Educational Measurement & Stat
- Educ. Stat./Research Methods
- Educ. Assess., Test., Meas.
- Educational Psychology
- School Psychology
- Social/Phil. Foundations of Educ.
- Special Education
- Counseling & Guidance
- Higher Education Evaluation & Research
- Pre-elementary/Early Childhood
- Elementary Education
- Junior High Education
- Secondary Education
- Adult & Continuing Education
- Education, General
- Education, Other

Doctorates in Teaching Fields:

- Agricultural Education
- Art Education
- Business Education
- English Education
- Foreign Languages Education
- Physical Educ, Health & Rec
- Health Education
- Home Economics Education
- Tech./Indust. Arts Education
- Mathematics Education
- Music Education
- Nursing Education
- Physical Education & Coaching
- Reading Education

¹ The Survey of Earned Doctorates is sponsored by five federal agencies. The data reported here were obtained from the National Opinion Research Center in a Microsoft Excel table entitled, "Research Doctorates Awarded to U.S. Citizens and Permanent Residents, by Race/Ethnicity, Gender, and Fine Field of Doctorate, 1981-1998."

Science Education
Social Science Education
Speech Education
Technical Education
Trade & Industrial Education
Teacher Educ./Specific Acad./Voc. Prog.

Education Doctorates in All Specializations

From 1981 to 1998,² the total number of education doctorates awarded nationally declined by 15.2%, from 6,711 to 5,694. As illustrated in Figure A-1, doctorates in all fields excluding Teaching Fields declined from 5,436 to 4,911 (-9.7%), while doctorates in Teaching Fields declined by 38.1% (from 1,275 to 789).

During the same eighteen-year period, national K-12 enrollment grew from 40.8 million pupils to 46.4 million (+13.7%). As a consequence of the simultaneous decline in doctorates and growth in enrollment, the number of pupils per doctorate awarded increased significantly as follows:

- Enrollment per doctorate excluding Teaching Fields rose from 7,506 pupils in 1981 to 9,438 in 1998, an increase of 25.7%.
- Enrollment per doctorate including Teaching Fields rose from 6,079 to 8,140, an increase of 33.6%.

The overall decline in education doctorates over the eighteen-year period has two distinct phases, however. From 1981 to 1989 there was a steady decline. Since 1989, awards rose significantly through 1996, but dropped sharply in 1997 and 1998.

By Gender. Figure A-2 illustrates how male doctorates have declined significantly during the last two decades, while female doctorates have grown appreciably. The facts are:

- Female education doctorates in all specializations excluding Teaching Fields rose from 2,646 to 3,170, an **increase** of 19.8%.
- Male education doctorates in all specializations excluding Teaching Fields declined from 2,790 to 1,737, a **decrease** of 37.7%.
- Both male and female doctorates in the Teaching Fields declined during the period, with male doctorates declining to a slightly greater extent.

By Ethnicity. The top lines in Figures A-3 to A-7 depict the total numbers of doctorates for each of the five ethnicities specified in this federally-sponsored data base. Total doctorates for Whites declined during the period while the number increased for each of the four other ethnic groups. These trends can be summarized as follows:³

² The years run from July 1 to June 30. Thus, the first year is July 1, 1980 to June 30, 1981 and the last year is from July 1, 1987 to June 30, 1998.

³ Figures A-3 to A-7 show all education doctorates, including Teaching Fields. Separate lines including and excluding teaching fields are not shown in order to reduce the congestion of lines in the figures, and because analysis revealed that taking out Teaching Fields by and large results in parallel lines slightly lower than the lines for all education doctorates.

- All education doctorates for Whites declined from 5,575 in 1981 to 4,390 in 1998, a decrease of 21.3%.
- For African Americans, education doctorates increased from 593 to 646, a rise of 8.9%
- For Hispanics, education doctorates rose from 162 to 282, an increase of 74.1%
- All education doctorates for Asians increased from 119 to 180, an increase of 51.3%
- And for Native Americans, the number of education doctorates rose from 39 in 1981 to 50 in 1998, a rise of 28.2%.

For all ethnicities, the decade of the eighties was flat or down in the production of doctorates in education. This is particularly evident in the case of African Americans (see Figure A-3). After about 1989, the production of doctorates increased for all ethnicities (including Whites), but beginning in 1994 Whites began another decline.

Notwithstanding the very different change rates during the period under study, nationally in 1998 Whites earned 77.6% of education doctorates, African Americans 11.4%, Hispanics 5.0%, Asians 3.2%, Native Americans 0.9%, and persons of unknown ethnicity earned 1.9%.

By Ethnicity and Gender. The bottom two lines in figures A-3 through A-7 show the trend during the last two decades in earned doctorates for men and women within the five ethnicities.

- In all ethnicities, women doctorates increased; but doctorates earned by White women increased at a significantly lower rate than the increase for minority women.
- Education doctorates earned by White and African American males declined significantly. The number earned by Asian and Native American males increased slightly, and those earned by Hispanic men increased substantially from their low point in 1984.

Table A-1 displays the end points shown graphically in Figures A-3 to A-7.

Table A-1

**Number and Percentage Change in
Education Doctorates Awarded by United States Universities
1981 and 1998
by Gender and Ethnicity**

Ethnicity	<u>Women</u>			<u>Men</u>		
	<u>Doctorates</u>		<u>Percent</u>	<u>Doctorates</u>		<u>Percent</u>
	<u>1981</u>	<u>1998</u>		<u>1981</u>	<u>1998</u>	
African American	308	455	+47.7	285	190	-33.3
Asian	54	108	+100.0	65	70	+7.7
Hispanic	81	171	+111.1	81	110	+35.8
Native American	15	24	+60.0	24	26	+8.3
White	2,711	2,806	+3.5	2,864	1,584	-44.7

Education Doctorates by Areas of Specialization

Figures A-8 through A-18 display the changes in earned education doctorates from 1981 to 1998 in areas of specialization by men and women and in total. Table A-2 shows numerically the magnitude of the changes over the eighteen-year period. The key observations are as follows:

- **Male doctorates** have declined in all specializations over the eighteen-year period under study (see Table A-2).
- **Female doctorates** have declined in all specializations except Educational Administration/Leadership, Curriculum/Instruction, School and Educational Psychology, and Assessment, Testing, Measurement (see Table A-2).
- **Total doctorates** have declined in all specializations except Educational Administration/Leadership, Curriculum/Instruction, and Assessment, Testing, Measurement (see Table A-2).
- **Education Administration/Leadership.**⁴ Education Administration/Leadership is one of the few specializations in which there has been an increase between 1981 and 1998 in the number of doctorates awarded (+23.2%--see Table A-2). Women account for all of the increase because the number of doctorates earned by men in Education Administration/Leadership has fallen substantially. In 1990, women started earning more doctorates in Administration/Leadership than men, and overall growth during the period for women has been more than 90% (see Figure A-8). We will more closely at Education Administration/Leadership in the next section.
- Awards in **Teaching Fields** (see Figure A-9) declined steadily from 1981 to 1988, but appear to have leveled off at about 800 in the last decade.
- While doctorates earned by men in **Curriculum/Instruction** have declined slowly but steadily over the period, the number earned by women has increased over the period, but not without ups and downs. The last three years show a slight downward trend (see Figure A-10).
- Doctorates in **Higher Education Evaluation and Research** reached bottom in 1990 after dropping more than 50%. They have been on an upswing in the nineties and the line graphs of men and women are more or less parallel (see Figure A-11).
- Doctorates awarded in **Guidance & Counseling** have fallen precipitously throughout the period for both men and women (see Figure A-12).
- Awards in **School and Educational Psychology** have fluctuated considerably over the years (see Figure A-13), with an overall decline of 7.7%. The increase in doctorates earned by women has, for the most part, offset the decline in awards to men.

⁴ Prior to 1991, there were only 3 doctorates awarded in the category "Education Leadership." In 1991, there were 442 in that category and 1,366 in the ongoing category of "Education Administration." In 1998, there were 867 doctorates in Education Administration and 1,043 in Education Leadership.

- Three specializations identified by the National Opinion Research Center—**Preschool, Elementary, and Secondary**—have been combined here into one category (see Figure A-14). The decline in doctorates in these grade-level specializations is the highest of all the specializations (-57.7%). Preschool (Early Childhood) has fallen the least, down 42% to just 47 doctorates in 1998.
- **Special Education** awards declined rapidly from 1981 to 1990, but have leveled off in the last decade at around 225 doctorates (see Figure A-15). Declines have occurred for both men and women.
- Doctorates awarded in **Adult & Continuing Education** actually were relatively level at about 200 from 1983 through 1995, but in the last three years of the 18-year period they fell by 25% (see Figure A-16).
- The venerable **Social and Philosophical Foundations of Education** took a real beating in the eighties, falling more than 60%; but since the bottom in 1990, awards in this specialization have recovered somewhat as more women have gone into the field (see Figure A-17).
- **Education Assessment, Testing, and Measurement** experienced a surge of popularity in the early eighties when awards increased from 77 in 1981 to 130 in 1984, but since then the number has drifted back down to about the 1981 level (see Figure A-18).

Doctorates in Education Administration/Leadership

We have seen in previous sections that Education Administration/Leadership is the only real growth area in doctoral awards in education and that women account for all of this growth. In this section we will look closely at doctoral awards in Administration/Leadership by ethnicity and gender.

But first, Figure A-19 displays the relationship between national K-12 enrollment and national doctoral awards in Administration/Leadership. In contrast to the ratio between enrollment and all education doctorates (see Figure A-1), which showed increasing enrollment per doctorate, enrollment per Administration/Leadership doctorate has declined slightly during the period (down by 7.7%). Since 1993, however, the ratio has increased somewhat because while doctorates awarded has remained fairly flat (see Figure A-8), national K-12 enrollment has grown substantially (up 8.3%).

We turn now to Figures A-20 through A-24 which display doctorates awarded in Administration/Leadership (A/L) by ethnicity and by gender within ethnicity. The findings are as follows:

- In Figure A-20, which concerns **African Americans**, it can be seen that virtually all the growth in doctorates in A/L has been attained by women. From 1981, the number of female African Americans earning doctorates has increased from 106 to 201, a rise of 89.6%; and since the low point in 1984 when only 59 doctorates were awarded, the rise has

been 240.7%. African American males received about the same number of doctorates in 1998 as they earned in 198, fewer than 100.

- Though the total number is small, **Asian** women have steadily increased the number of doctorates they earn in A/L (see Figure A-21). Asian men, in contrast and like African American men, have languished at about fifteen doctorates per year.
- Of all the males, **Hispanic** men are the only ones to show a general upward trend in doctorates in A/L over the eighteen-year period. Beginning in the early nineties, both Hispanic males and females have experienced an upward trend resulting in large percentage increases (see Figure A-22), but the absolute numbers are very small.
- **Native American** doctorates in A/L have been produced in single and double handfals, with the number fluctuating greatly between years in percentage terms, but usually being below ten per year for each gender group (see Figure A-23).
- The trend for **White** males has been down during the 18-year period, culminating in an overall 25% drop by 1998. Female whites, on the other hand, have nearly doubled their earned doctorates in A/L, rising from 442 in 1981 to 837 in 1998 (see Figure A-24).

Table A-2

Number and Percentage Change in Education Doctorates Awarded by United States Universities
1991 and 1998
By Gender and Selected Specializations

<u>Specialization</u>	<u>Total Men and Women</u>			<u>Women</u>			<u>Men</u>		
	<u>Doctorates Awarded</u>		<u>Percent Change</u>	<u>Doctorates Awarded</u>		<u>Percent Change</u>	<u>Doctorates Awarded</u>		<u>Percent Change</u>
	<u>1981</u>	<u>1998</u>		<u>1981</u>	<u>1998</u>		<u>1981</u>	<u>1998</u>	
Ed. Administration/Leadership (F-8)	1550	1910	23.2%	596	1144	91.9%	954	766	-19.7%
All Teaching Fields	1275	789	-38.1%	642	483	-24.8%	633	304	-52.0%
Curriculum/Instruction	740	766	3.5%	427	554	29.7%	313	212	-32.3%
Higher Education Evaluation & Research	627	402	-35.9%	266	234	-12.0%	361	168	-53.5%
Counseling & Guidance	525	246	-53.1%	244	169	-30.7%	281	77	-72.6%
School & Educational Psychology	414	382	-7.7%	223	257	15.2%	191	125	-34.6%
Primary, Elementary, or Secondary Education	357	151	-57.7%	230	118	-48.7%	127	32	-74.8%
Special Education	300	224	-25.3%	190	185	-2.6%	110	39	-64.5%
Adult & Continuing Education	210	147	-30.0%	105	95	-9.5%	105	52	-50.5%
Social/Philosophical Foundations	167	110	-34.1%	76	72	-5.3%	91	38	-58.2%
Assessment, Testing, & Measurement	77	78	1.3%	38	42	10.5%	39	36	-7.7%

Source: National Opinion Research Center at the University of Chicago data tables. Several small and combination categories have not been included.

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Figure A-1

Education Doctorates Awarded by United States Universities and Enrollment Per Doctorate Awarded, 1981 to 1998

Source: National Opinion Research Center at the University of Chicago

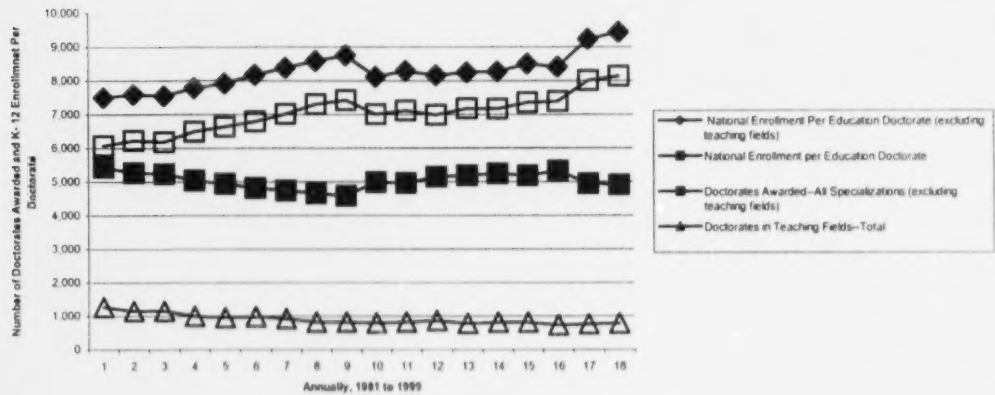


Figure A-2

Education Doctorates Awarded by United States Universities, 1981 to 1998, Men and Women

Source: National Opinion Research Center at the University of Chicago

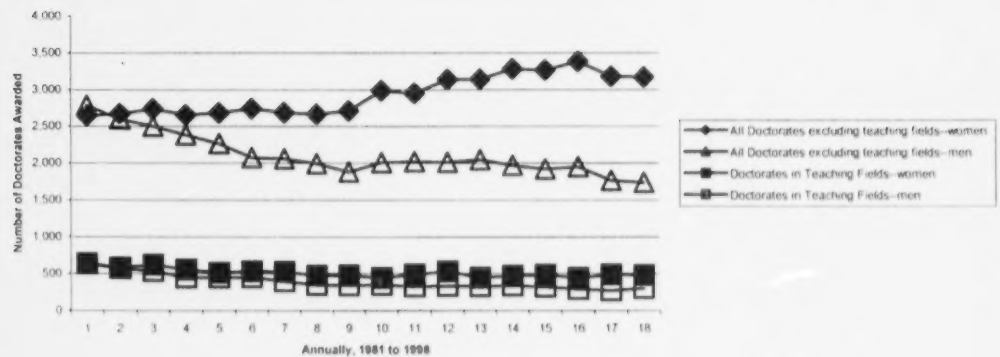


Figure A-3

Education Doctorates Awarded by United States Universities, 1981 to 1998, African American Men and Women
Source National Opinion Research Center at the University of Chicago

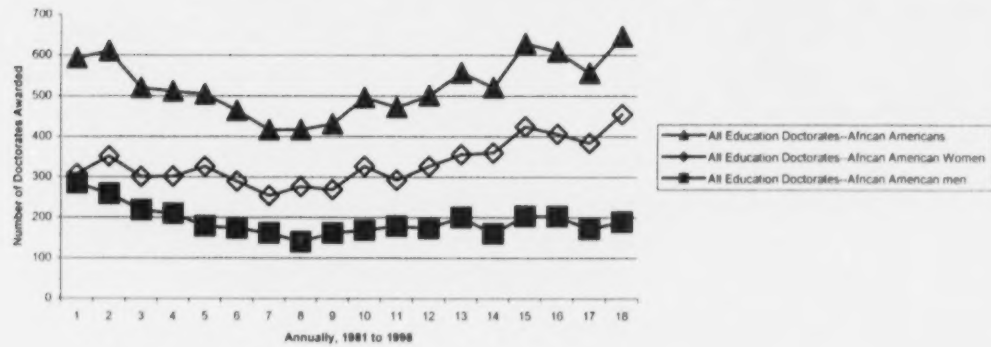


Figure A-4

Education Doctorates Awarded by United States Universities, 1981 to 1998, Asian Men and Women
Source: National Opinion Research Center at the University of Chicago

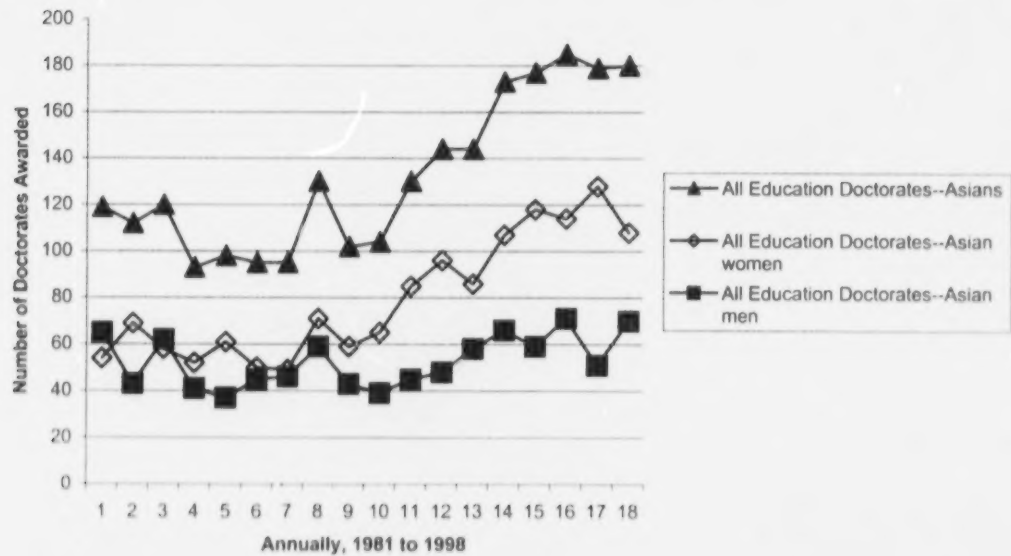


Figure A-5

Education Doctorates Awarded by United States Universities, 1981 to 1998, Hispanic Men and Women

Source: National Opinion Research Center at the University of Chicago

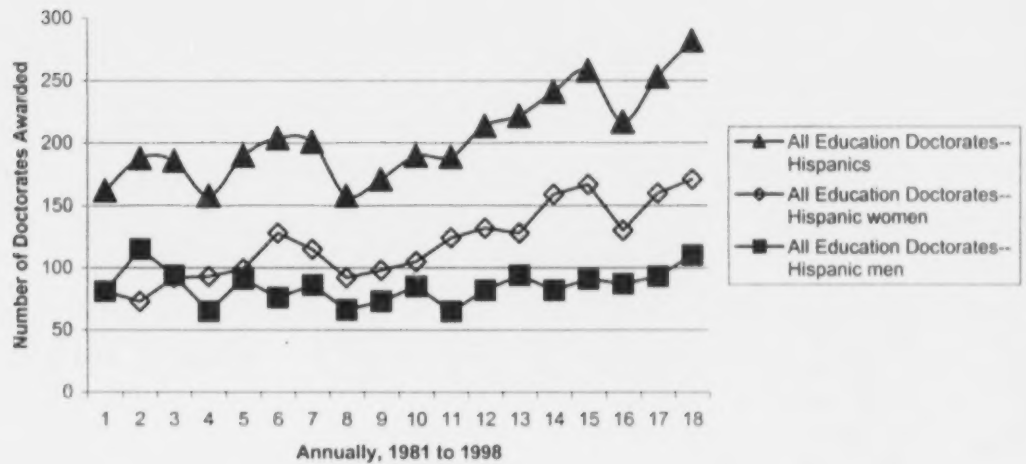


Figure A-6

Education Doctorates Awarded by United States Universities, 1981 to 1998, Native American Men and Women

Source: National Opinion Research Center at the University of Chicago

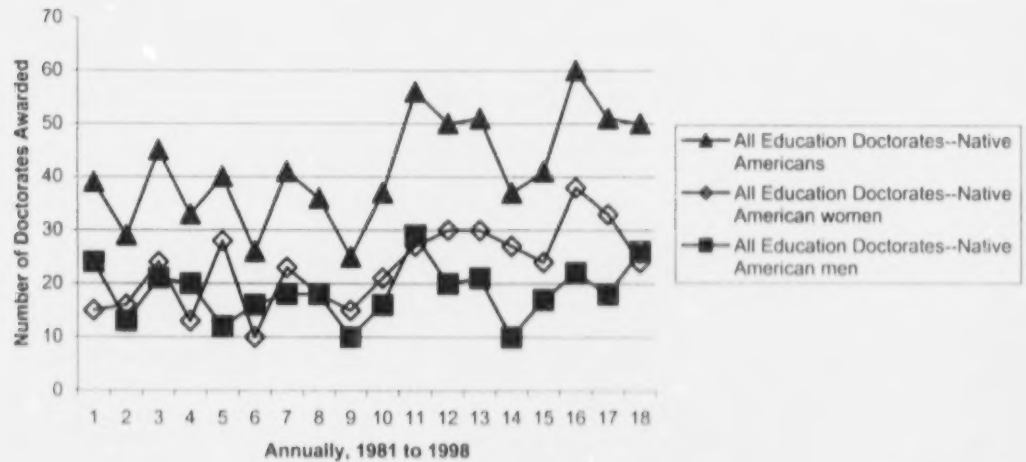


Figure A-7

Education Doctorates Awarded by United States Universities, 1981 to 1998, White Men and Women

Source: National Opinion Research Center at the University of Chicago

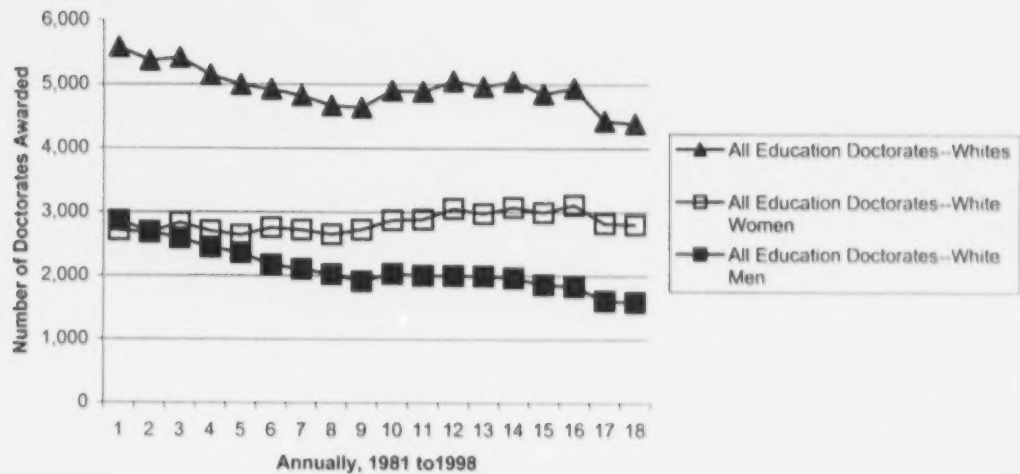


Figure A-8

Doctorates Awarded by United States Universities in Education Administration/Leadership, 1981 to 1998, Men and Women

Source: National Opinion Research Center at the University of Chicago

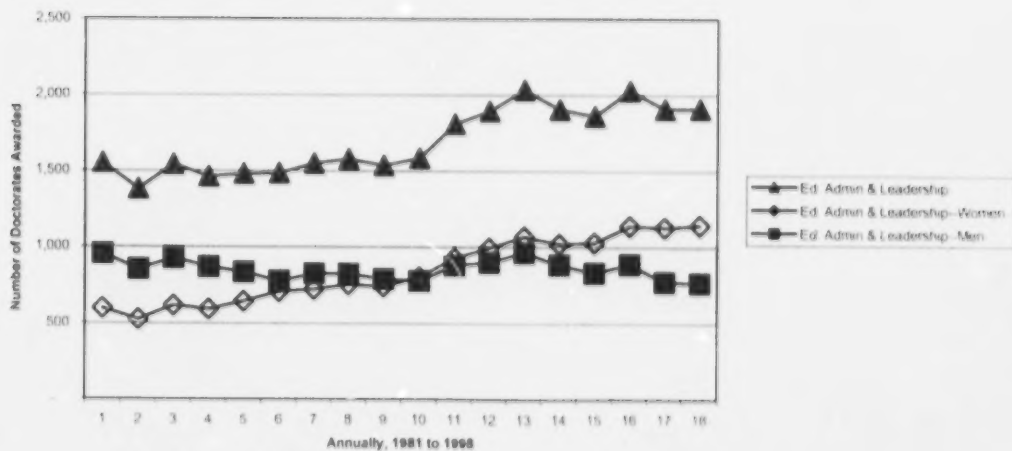


Figure A-9

Doctorates Awarded in All Teaching Fields by United States Universities, 1981 to 1998,
Men and Women

Source: National Opinion Research Center at the University of Chicago

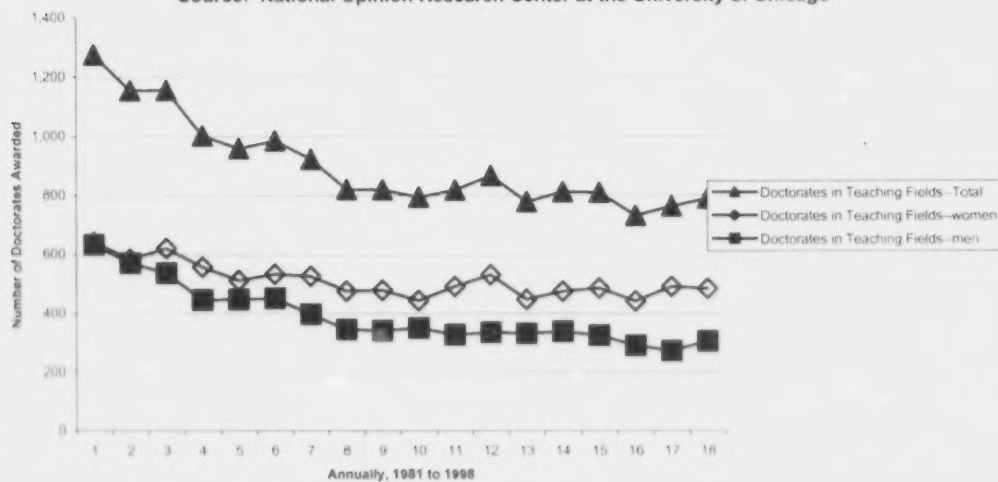


Figure A-10

Doctorates Awarded in Curriculum/Instruction by United States Universities, 1981 to
1998, Men and Women

Source: National Opinion Research Center at the University of Chicago

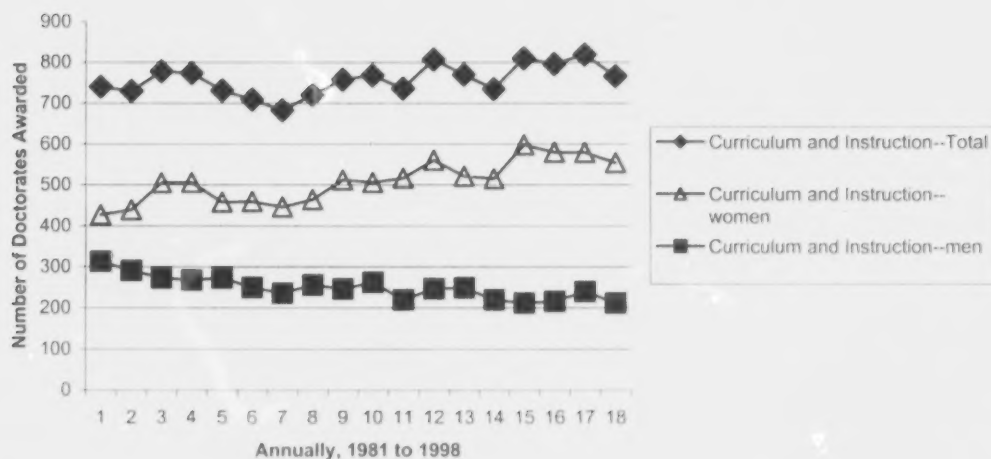


Figure A-11

Doctorates Awarded in Higher Education Evaluation & Research by United States Universities, 1981 to 1998, Men and Women

Source: National Opinion Research Center at the University of Chicago

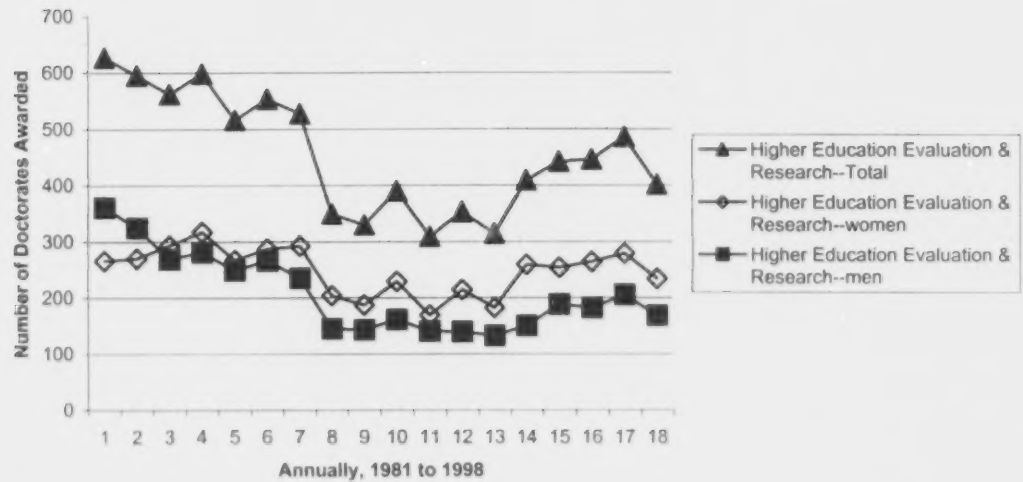


Figure A-12

Doctorates Awarded in Counseling & Guidance by United States Universities, 1981 to 1998, Men and Women

Source: National Opinion Research Center at the University of Chicago

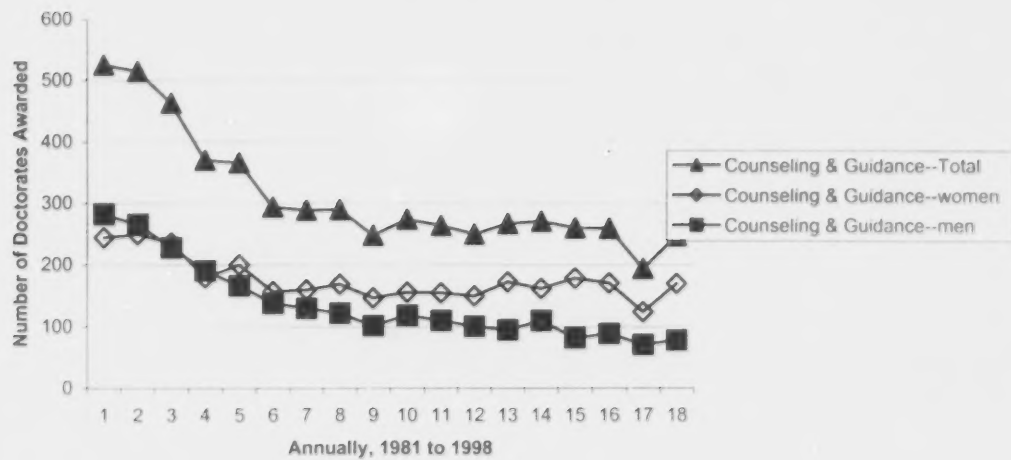


Figure A-13

Doctorates Awarded in School and Educational Psychology by United States Universities,
1981 to 1998, Men and Women

Source: National Opinion Research Center at the University of Chicago

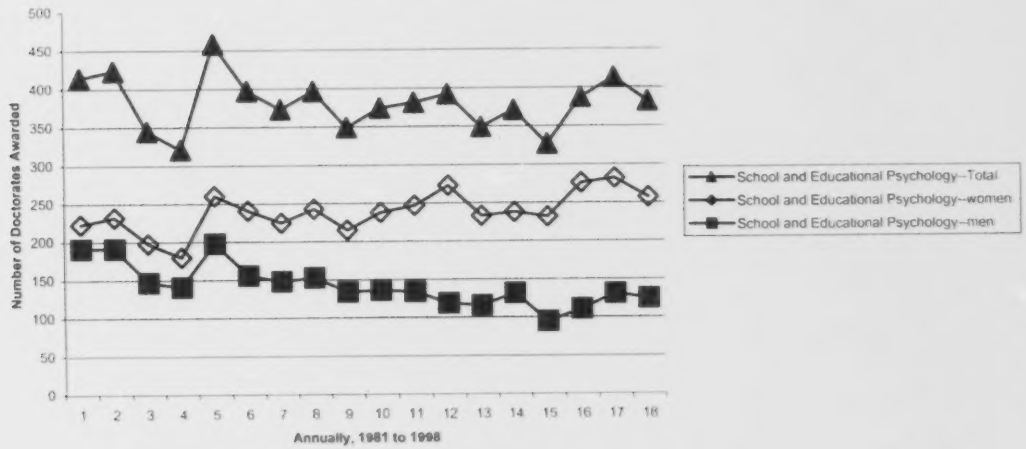


Figure A-14

Doctorates Awarded in Preschool, Elementary, or Secondary Education by United States
Universities, 1981 to 1998, Men and Women

Source: National Opinion Research Center at the University of Chicago

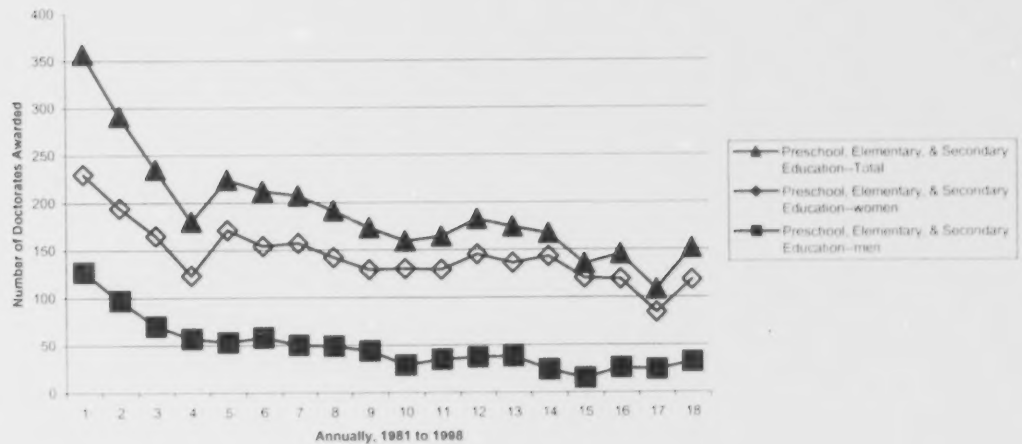


Figure A-15

Doctorates Awarded in Special Education by United States Universities, 1981 to 1998,
Men and Women

Source: National Opinion Research Center at the University of Chicago

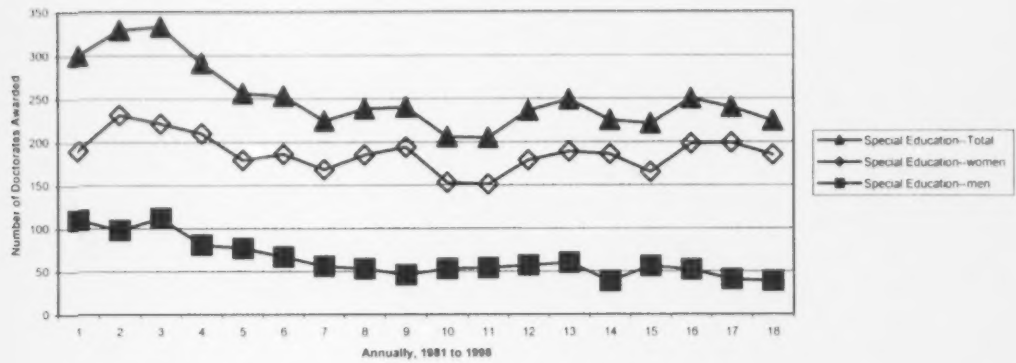


Figure A-16

Doctorates Awarded in Adult & Continuing Education by United States Universities, 1981
to 1998, Men and Women

Source: National Opinion Research Center at the University of Chicago

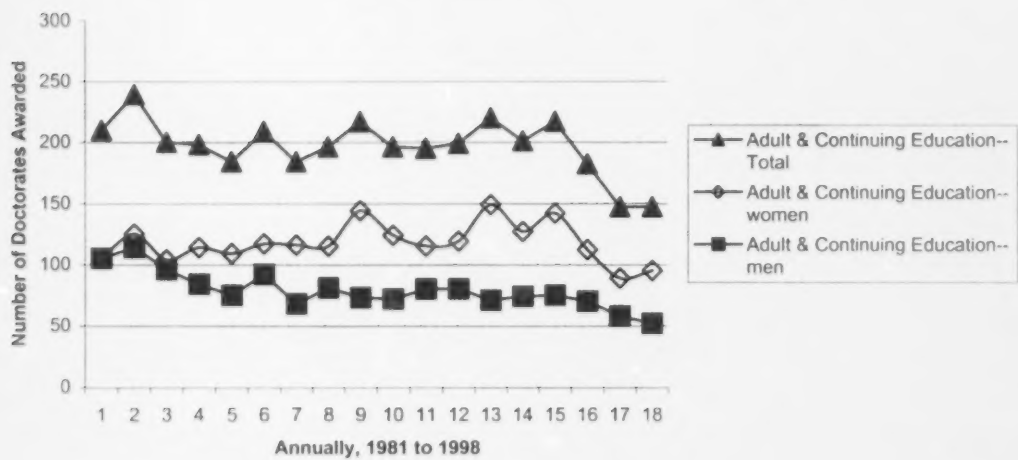


Figure A-17

Doctorates Awarded in Social/Philosophical Foundations of Education by United States Universities, 1981 to 1998, Men and Women

Source: National Opinion Research Center at the University of Chicago

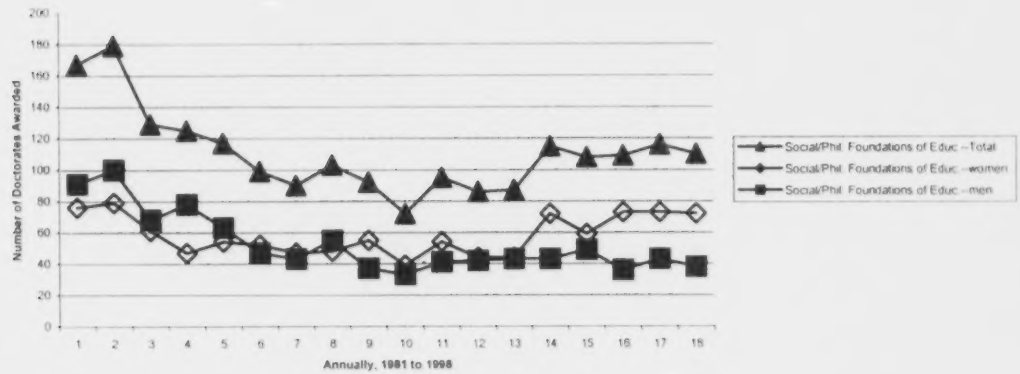


Figure A-18

Doctorates Awarded in Education Assessment, Testing, & Measurement by United States Universities, 1981 to 1998, Men and Women

Source: National Opinion Research Center at the University of Chicago

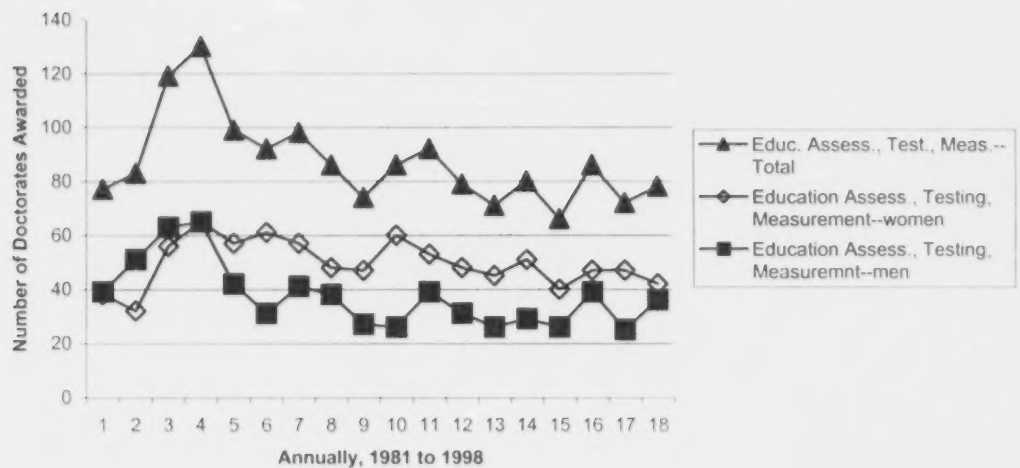


Figure A-19

K-12 Enrollment Per Doctorates Awarded in Education Administration/Leadership, 1981 to 1998

Sources: National Opinion Research Center at the University of Chicago and the National Center for Educational Statistics

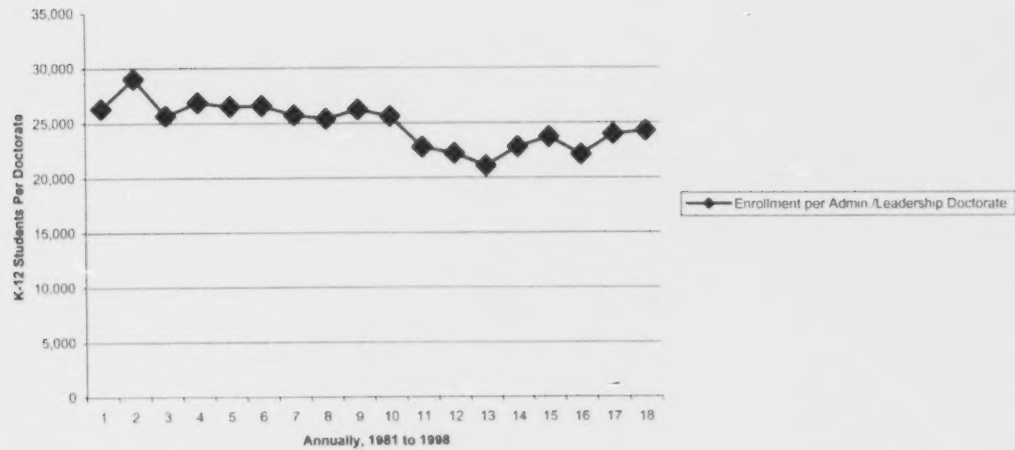


Figure A-20

Doctorates Awarded by United States Universities in Education Administration/Leadership, 1981 to 1998, African American Men and Women

Source: National Opinion Research Center at the University of Chicago

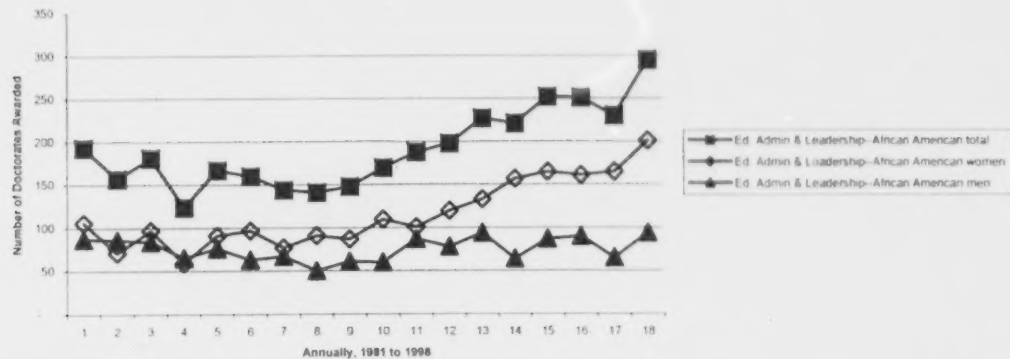


Figure A-21

Doctorates Awarded by United States Universities in Education
Administration/Leadership, 1981 to 1998, Asian Men and Women

Source: National Opinion Research Center at the University of Chicago

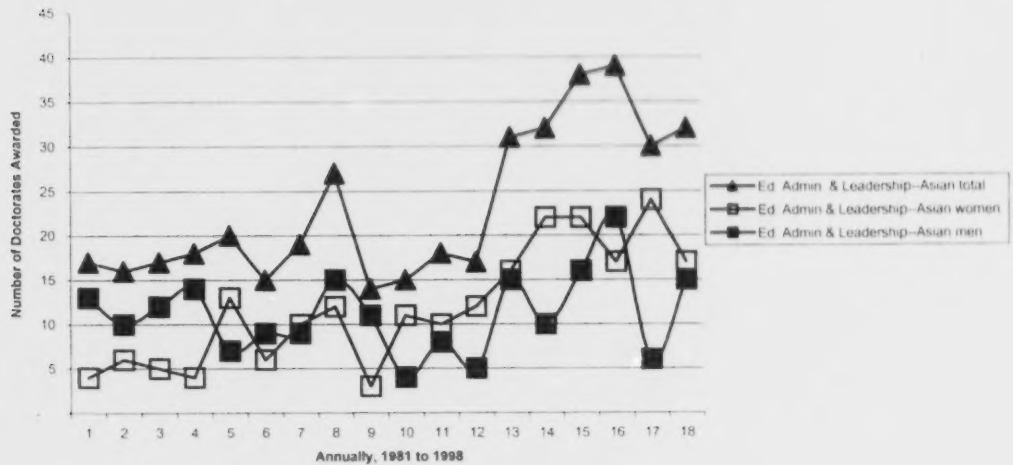


Figure A-22

Doctorates Awarded by United States Universities in Education
Administration/Leadership, 1981 to 1998, Hispanic Men and Women

Source: National Opinion Research Center at the University of Chicago

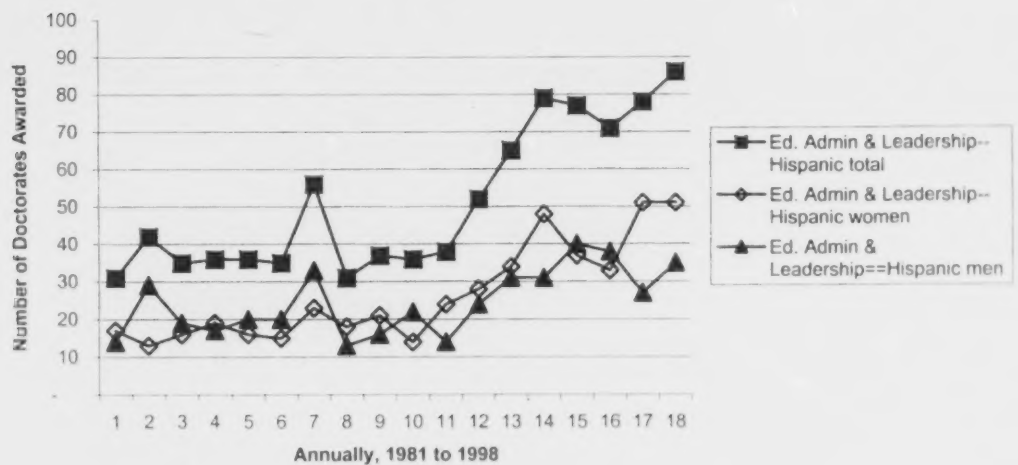


Figure A-23

Doctorates Awarded by United States Universities in Education
Administration/Leadership, 1981 to 1998, Native American Men and Women

Source: National Opinion Research Center at the University of Chicago

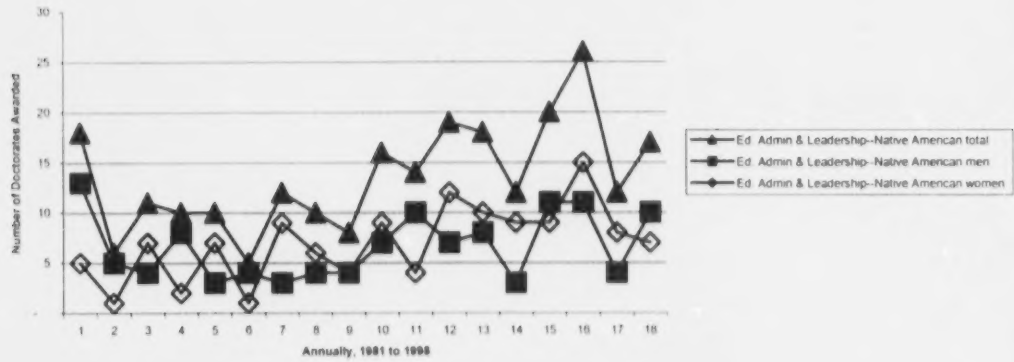
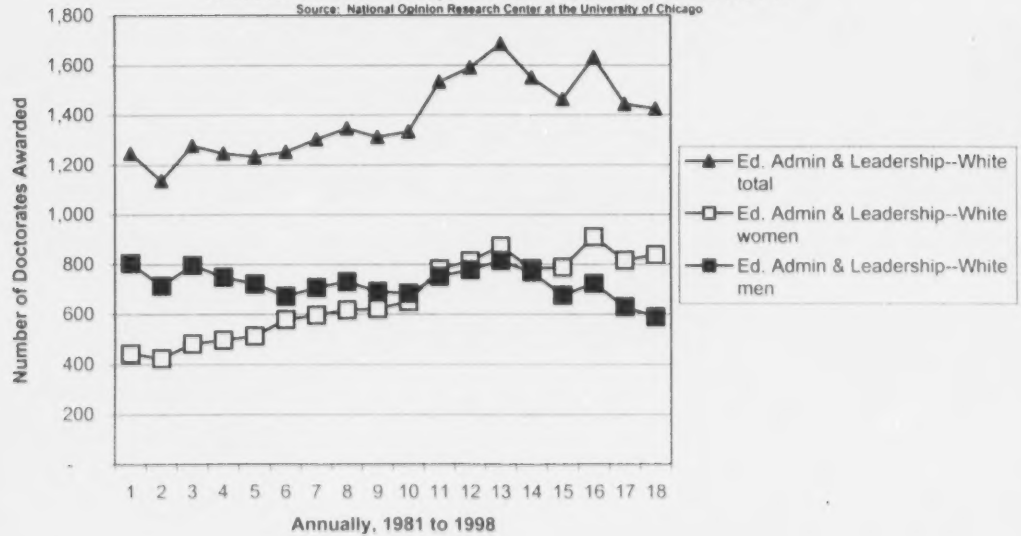


Figure A-24

Doctorates Awarded By United States Universities in Education
Administration/Leadership, 1981 to 1998, White Men and Women

Source: National Opinion Research Center at the University of Chicago



Appendix B

Production of Education Doctorates in California, 1978-1998

In this chapter we look closely at the production of education doctorates from 1978 to 1998 in California by gender, ethnicity, and specialization. In addition, we present some characteristics of the doctoral class of 1998 by ethnicity and gender.

Production of Education Doctorates in California, 1978 to 1998

As a point of reference, Table B-1 displays the institutions that produced education doctorates in 1998 and the number awarded, according to the federal Survey of Earned Doctorates. (Table B-1 includes 42 doctorates earned by Non-U.S. citizens with temporary visas (20) and doctorates earned by persons with unknown citizenship (22); only U.S. citizens and Non-U.S. citizens with permanent visas are included in subsequent Figures and Tables in this chapter.)

Table B-1			
Number and Percentage of Education Doctorates Produced By California Institutions, 1998			
Institution	Number of Doctorates	Percentage of Doctorates	
University of Southern California	104	22.8%	
UCLA	64	14.0%	
University of San Francisco	53	11.6%	
University of La Verne	40	8.8%	
Pepperdine	32	7.0%	
Stanford	28	6.1%	
UC Berkeley	20	4.4%	
UC Santa Barbara	20	4.4%	
UC Davis	17	3.7%	
Claremont Graduate School	15	3.3%	
University of San Diego	14	3.1%	
UC Riverside	12	2.6%	
University of the Pacific	9	2.0%	
San Diego State University	7	1.5%	
U.S. International University	4	0.9%	
Azusa Pacific University	3	0.7%	
Biola University	2	0.4%	
Fielding Institute	2	0.4%	
UC San Diego	2	0.4%	
UC Santa Cruz	2	0.4%	
California Institute of Technology	1	0.2%	
California School of Prof. Psychology--LA	1	0.2%	
California School of Prof. Psychology--SD	1	0.2%	
Graduate Theological Union	1	0.2%	
La Sierra University	1	0.2%	

School of Theology of Claremont		1	0.2%
UC Irvine		1	0.2%
		457	100.0%

Total Doctorates and Doctorates by Gender. As shown in Figure B-1, over the last twenty years, the total production of education doctorates in California has, for the most part, "hugged the flatline." Since 1991, however, there has been a discernible downward trend entirely due to the decline of awards to males.

In 1978, new male doctorates outnumbered women 207 to 182. By 1983, women outnumbered men 277 to 202, and the gap has grown to the point where in 1998 more than twice as many women received doctorates as men (278 to 135).

Doctorates By Ethnicity. Figures B-2 through B-5 display doctorate awards by ethnicity and by ethnicity within gender. The key observations are as follows:

- Over the twenty-year period there has been slow growth in the number of awards to minorities, while Whites have returned to about 300 doctorates after rising to 370 in 1991 (see Figure B-2).
- Awards to Hispanics have increased steadily, rising from less than twenty in 1973 to 45 in 1998. Awards to African Americans and Asians have increased during the twenty-year period, but there have been numerous ups and downs (see Figure B-3).
- While doctorates earned by Whites have remained at about 300 or higher, the number attained by White males has fallen dramatically, especially since 1991 (see Figure B-4). The number of awards earned by men in each of the minority ethnicities has not changed appreciably over the twenty-year period
- White women earned 44% more doctorates in 1998 than in 1978, but there has been a downward trend since 1992 for this group (see Figure B-5).

Men and Women Within Ethnicities. Figures B-6 through B-10 show the number of education doctorates earned by men and women within ethnicities. The key findings are:

- Hispanic women have demonstrated the steadiest growth trend during the past two decades (see Figures B-6 to B-10).
- Males in each of the minority ethnicities have shown less growth in doctorates received than women in the same minority group (see Figures B-6 to B-10).

Doctorates by Specialization. As shown in Figure B-11, from 1988 to 1998 the only major specialization that has increased production of doctorates was Administration/Leadership. Curriculum & Instruction and Educational Psychology have bounced up and down, but the trend in the nineties appears essentially flat for both specializations.

There also is no discernible growth in the annual production of doctorates in the low-enrollment specializations such as School Psychology, Special Education, Adult & Continuing Education, Testing & Measurement as shown in Figure 4-12. Only Social and Philosophical Foundations demonstrates a slight upward trend.

Time to Doctorate. Figure B-13 displays the number of years from baccalaureate to doctorate and the registered time for twenty-five years beginning in 1973. In the 1970s total time and registered time were significantly lower than in the nineties. From 1978 to 1993 the median age of recipients went up 5 years (assuming the age at baccalaureate has not changed). Registered time was 18% higher in 1998 than in 1978.

Characteristics of Education Doctorates in 1998

In this section we summarize the characteristics of education doctorates earned in 1998. Figures B-14 and B-15 graphically summarize the distribution of doctorates among specializations and ethnicities.

Age Distribution. Within California (see Table B-2), female doctoral recipients in 1998 were slightly older than males (65.6% over forty years old compared to 56.3%). There were no Asian and African American doctorates under the age of 36, compared to 14% and 16% for Hispanics and Whites, respectively. Asians had the highest percentage (66.7%) of doctorates over the age of forty-five.

Time to Doctorate. Table B-3 indicates little difference in the time from baccalaureate to doctorate among ethnicities except that Asians had slightly less time (median time of about three years less than for all doctorates). African Americans had a slightly longer registered time than the grand median (8.6 years versus 8.0 years), while Asians were slightly below at 7.4 years.

Employment Plans of Education Doctorates. Perhaps the most surprising information in the federal Survey of Earned Doctorates concerns the employment plans of the California doctoral class of 1998 as shown in Table B-4:

- Only 21.2% of 403 U.S. citizen doctorates had plans for employment in elementary and secondary education. (Another 19.8% had study plans or the postdoc plans were unknown; and among those with postdoc employment plans, the type of institution was unknown in 10.9% of the cases.)
- Only 6.9% had plans to work in Junior or Community Colleges.
- 28.4% had plans to work in 4-year or foreign colleges and universities.
- Among Mexican-Americans, only 3.6% of the respondents had plans to work in elementary and secondary education, while 14.3% were headed to community colleges and nearly half (42.9%) had their eyes on a job in 4-year or foreign colleges.
- African Americans, Whites, and Other Hispanics had employment plans in elementary and secondary education in the 20% to 25% range.

Table B-2

**Distribution of 1998 Education Doctorate Recipients by Age at Doctorate
California Institutions**

	Age Grouping										Total
	26-30		31-35		36-40		41-45		Over 45		
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	
Gender											
Male	7	5.5%	19	14.8%	30	23.4%	16	12.5%	56	43.8%	128
Female	11	4.6%	36	14.9%	36	14.9%	44	18.3%	114	47.3%	241
Citizenship											
US Citizenship	15	4.4%	49	14.3%	58	16.9%	58	16.9%	163	47.5%	343
Permanent Resident	0	0.0%	0	0.0%	3	50.0%	0	0.0%	3	50.0%	6
Temporary Visa	0	0.0%	5	41.7%	4	33.3%	0	0.0%	3	25.0%	12
Race/Ethnicity (US citizens only)											
Asian	0	0.0%	0	0.0%	5	33.3%	0	0.0%	10	66.7%	15
Black	0	0.0%	0	0.0%	7	25.0%	8	28.6%	13	46.4%	28
Hispanic	0	0.0%	5	14.3%	5	14.3%	6	17.1%	19	54.3%	35
American Indian	0		0		0		0		0		0
White	10	4.1%	40	16.3%	40	16.3%	41	16.7%	115	46.7%	246

Source: NSF/NIH/USED/NEH/USDA/NASA, Survey of Earned Doctorates

CPEC NSF Table 18 age at doctorate 1998

Table B-3

**Characteristics of Education Doctorates, California Institutions, 1998
By Ethnicity and Citizenship**

	<u>American Indian</u>		<u>Asian</u>		<u>African American</u>		<u>White</u>	
	<u>Non-U.S.</u>		<u>Non-U.S.</u>		<u>Non-U.S.</u>		<u>Non-U.S.</u>	
	<u>U.S. Citizen</u>	<u>Permanent Visa</u>	<u>U.S. Citizen</u>	<u>Permanent Visa</u>	<u>U.S. Citizen</u>	<u>Permanent Visa</u>	<u>U.S. Citizen</u>	<u>Permanent Visa</u>
Number of Education Doctorates	4	0	24	6	38	0	283	4
% Male	50.0%		33.3%	0.333	34.2%		31.4%	25.0%
% Female	50.0%		62.5%	0.5	65.8%		68.6%	75.0%
% Unknown Gender	0.0%		4.2%	0.167	0.0%		0.0%	0.0%
Time to Degree--Total Time (median)	19.9		16.5	13.2	19.5		19.5	10.5
Time to Degree--Registered Time (median)	6.7		7.4	7.6	8.6		8.1	7.2

	<u>Mexican-American</u>		<u>Other Hispanic</u>		<u>Unknown</u>		<u>Total</u>	
	<u>Non-U.S.</u>		<u>Non-U.S.</u>		<u>Non-U.S.</u>		<u>Non-U.S.</u>	
	<u>U.S. Citizen</u>	<u>Permanent Visa</u>	<u>U.S. Citizen</u>	<u>Permanent Visa</u>	<u>U.S. Citizen</u>	<u>Permanent Visa</u>	<u>U.S. Citizen</u>	<u>Permanent Visa</u>
Number of Education Doctorates	28	0	15	0	11	0	403	10
% Male	39.3%		26.7%		36.4%		32.3%	30.8%
% Female	60.7%		73.3%		63.6%		67.4%	61.5%
% Unknown Gender	0.0%		0.0%		0.0%		0.2%	77.0%
Time to Degree--Total Time (median)	20.9		18.3		21.90		19.4	13.2
Time to Degree--Registered Time (median)	7.9		7.5		7.90		8.0	7.5

Source: National Opinion Research Center/Survey of Earned Doctorates 1998
CPEC NSF table a-4 reduced/sheet 1

Table B-4

**Employment Plans of Education Doctorates, California Institutions, 1998
By Ethnicity and Citizenship**

	<u>American Indian</u>		<u>Asian</u>		<u>African American</u>		<u>White</u>	
	<u>Non-U.S.</u>		<u>Non-U.S.</u>		<u>Non-U.S.</u>		<u>Non-U.S.</u>	
	<u>U.S. Citizen</u>	<u>Permanent Visa</u>	<u>U.S. Citizen</u>	<u>Permanent Visa</u>	<u>U.S. Citizen</u>	<u>Permanent Visa</u>	<u>U.S. Citizen</u>	<u>Permanent Visa</u>
Number of Respondents	4	0	24	6	38	0	283	4
Elementary or Secondary School	0.0%		12.5%	0.333	23.7%		24.7%	50.0%
Junior or Community College	0.0%		4.2%	0	10.5%		4.9%	0.0%
Other Education Institution	25.0%		25.0%	0.167	23.7%		29.0%	0.0%
Industry/Business	25.0%		8.3%	0.167	0.0%		7.8%	25.0%
Government	0.0%		4.2%	0	0.0%		1.8%	0.0%
Nonprofit	0.0%		8.3%	0	7.9%		4.6%	0.0%
Other/Unknown	50.0%		12.5%	0	13.2%		8.8%	0.0%
Total Percentage of Doctorates with Postdoc Employment Plans*	100.0%		75.0%	66.7%	78.9%		81.6%	75.0%

	<u>Mexican-American</u>		<u>Other Hispanic</u>		<u>Unknown</u>		<u>Total</u>	
	<u>Non-U.S.</u>		<u>Non-U.S.</u>		<u>Non-U.S.</u>		<u>Non-U.S.</u>	
	<u>U.S. Citizen</u>	<u>Permanent Visa</u>	<u>U.S. Citizen</u>	<u>Permanent Visa</u>	<u>U.S. Citizen</u>	<u>Permanent Visa</u>	<u>U.S. Citizen</u>	<u>Permanent Visa</u>
Number of Respondents	28	0	15	0	11	0	403	10
Elementary or Secondary School	3.6%		20.0%		0.0%		21.2%	30.8%
Junior or Community College	14.3%		13.3%		18.2%		6.9%	0.0%
Other Education Institution	42.9%		13.3%		27.3%		28.4%	15.4%
Industry/Business	3.6%		6.7%		0.0%		6.7%	15.4%
Government	3.6%		0.0%		0.0%		1.7%	0.0%
Nonprofit	0.0%		0.0%		0.0%		4.4%	0.0%
Other/Unknown	7.1%		26.7%		18.2%		10.9%	7.7%
Total Percentage of Doctorates with Postdoc Employment Plans*	75.0%		80.0%		63.6%		80.2%	69.3%

*Doctorates without postdoc employment plans either had study plans or the postdoc plan was unknown.

Source: National Opinion Research Center/Survey of Earned Doctorates 1998

CPEC NSF California Postdoc plans/sheet 1

Figure B-1

Education Doctorates Awarded by California Institutions, 1978, 1983, 1988-98, Men and Women
(U.S. Citizens and Permanent Visas)

Source: National Opinion Research Center at the University of Chicago

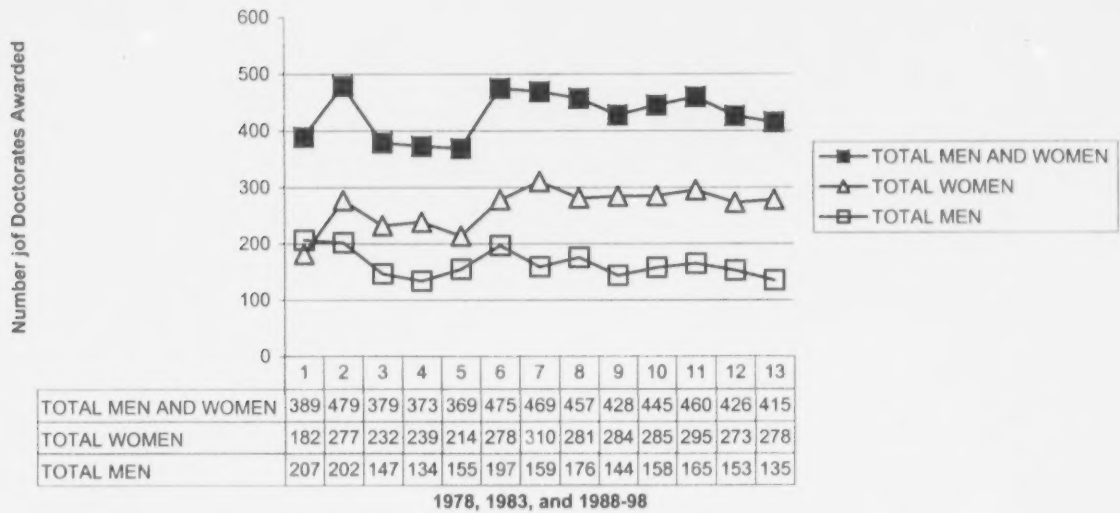


Figure B-2

Education Doctorates Awarded by California Institutions, 1978, 1983, 1988-1998, By Majority and Minority Ethnicity

Source: National Opinion Research Center at the University of Chicago

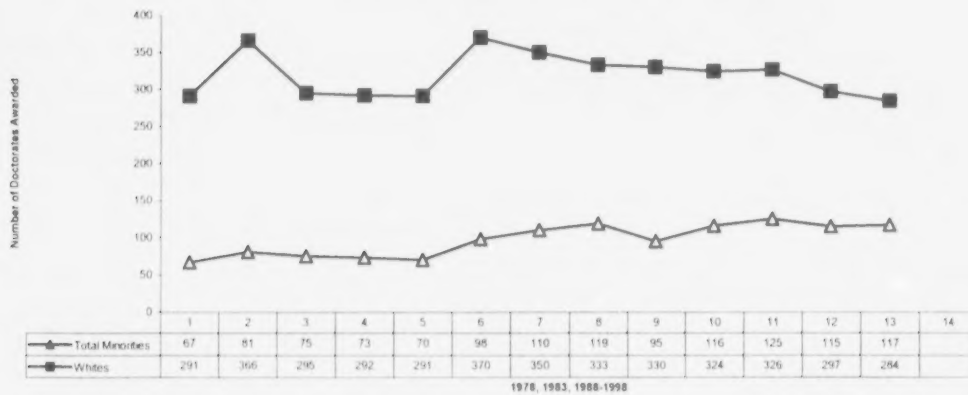


Figure B-3

Education Doctorates Awarded by California Institutions, 1978, 1983, 1988-1998, by Minority Ethnicity

Source: National Opinion Research Center at the University of Chicago

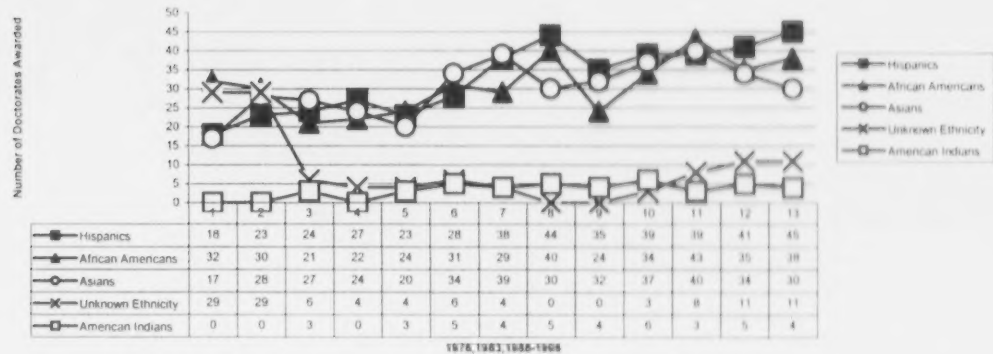
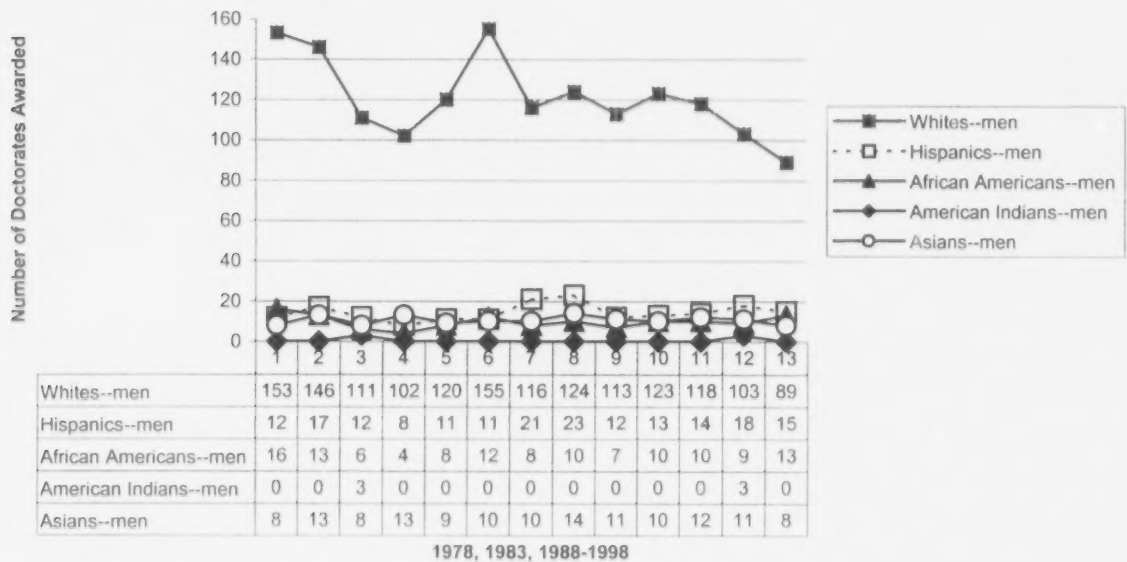


Figure B-4

Education Doctorates Awarded by California Institutions, 1978, 1983, 1988-1998, Men by Ethnicity

Source: National Opinion Research Center at the University of Chicago



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Figure B-5

Education Doctorates Awarded by California Institutions, 1978, 1983, 1988-1998, Women
by Ethnicity

Source: National Opinion Research Center at the University of Chicago

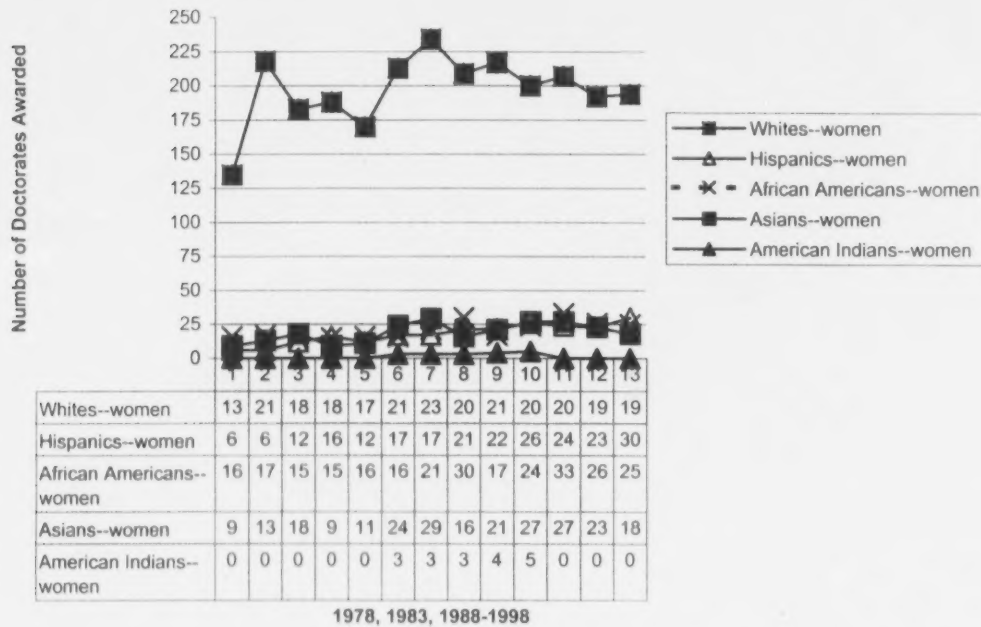


Figure B-6

Education Doctorates Awarded by California Institutions, 1978, 1983, 1988-1998, Hispanic Men and Women

Source: National Opinion Research Center at the University of Chicago

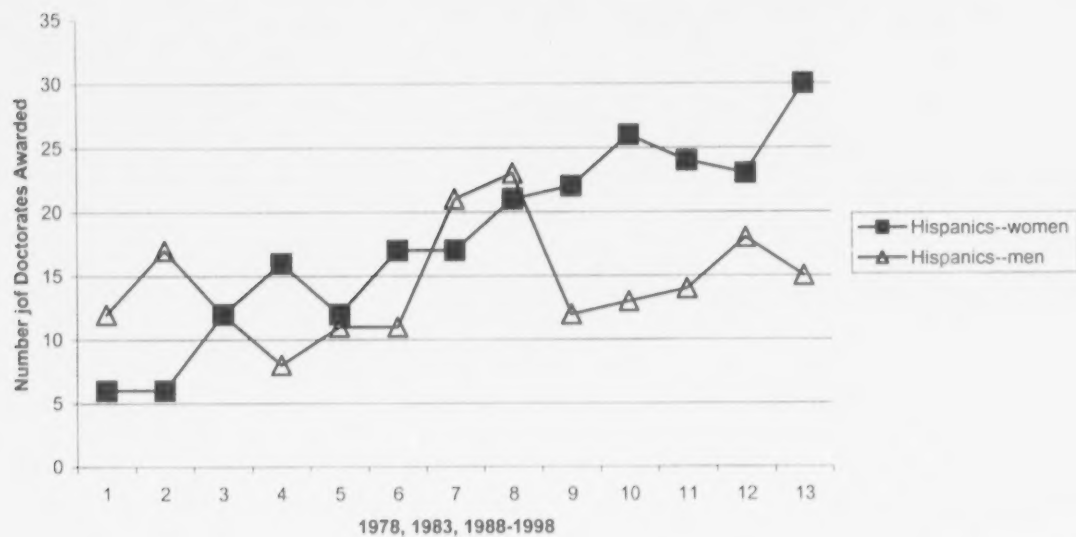


Figure B-7

Education Doctorates Awarded by California Institutions, 1978, 1983, 1988-1998, African American Men and Women

Source: National Opinion Research Center at the University of Chicago

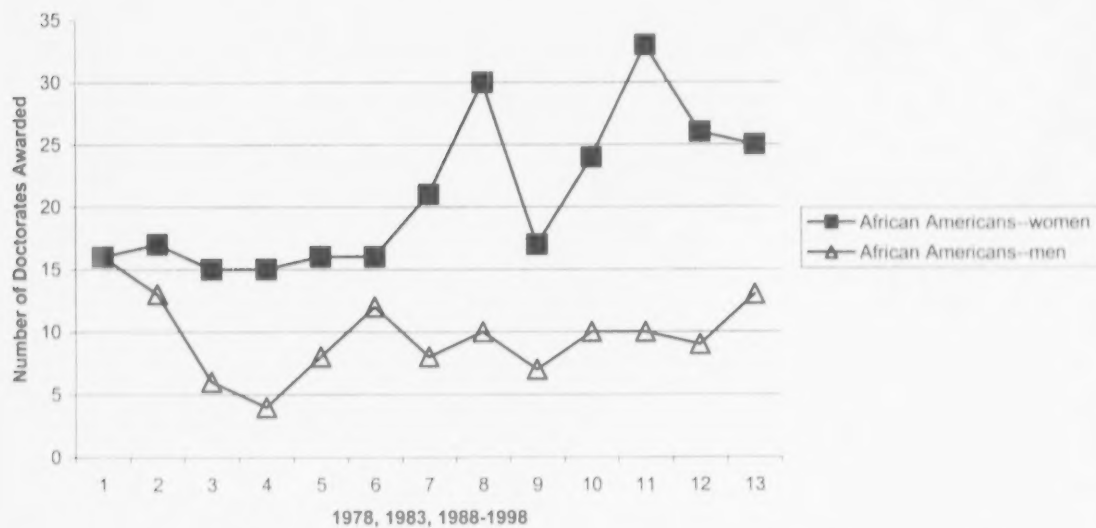


Figure B-8

Education Doctorates Awarded by California Institutions, 1978, 1983, 1988-1998, Asian Men and Women

Source: National Opinion Research Center at the University of Chicago

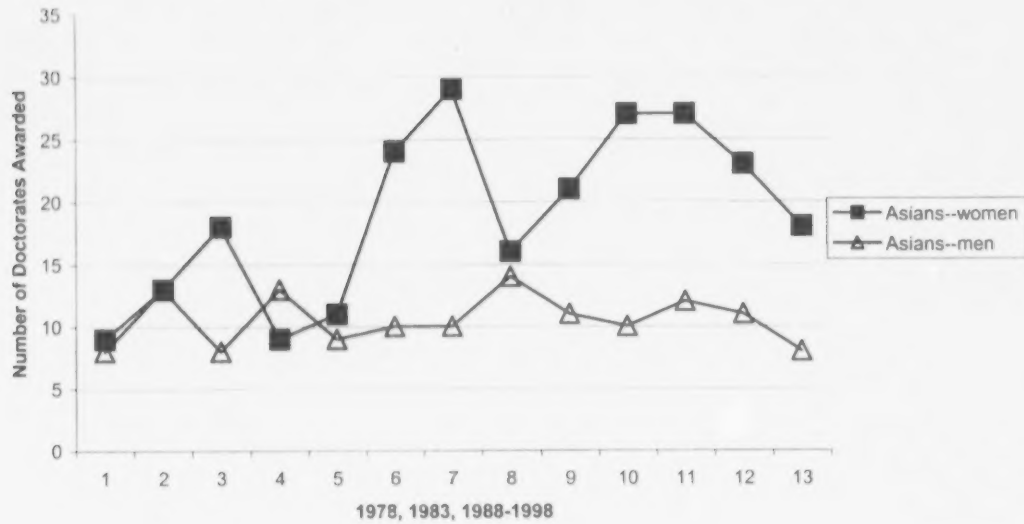


Figure B-9

Education Doctorates Awarded by California Institutions, 1978, 1983, 1988-1998, American-Indian Men and Women

Source: National Opinion Research Center at the University of Chicago

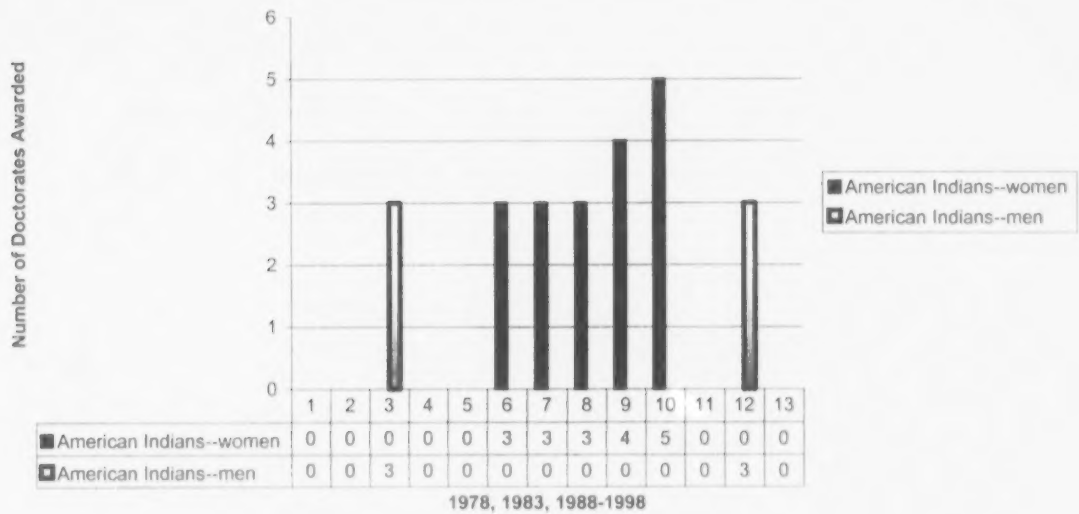


Figure B-10

Education Doctorates Awarded by California Institutions, 1978, 1983, 1988-1998, White Men and Women

Source: National Opinion Research Center at the University of Chicago

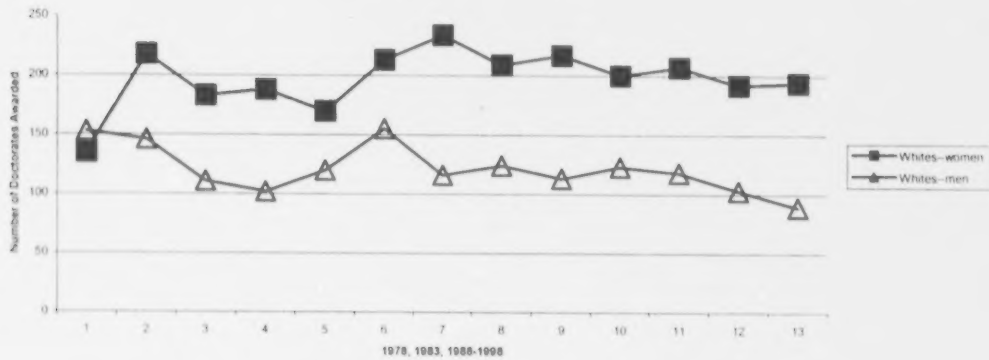
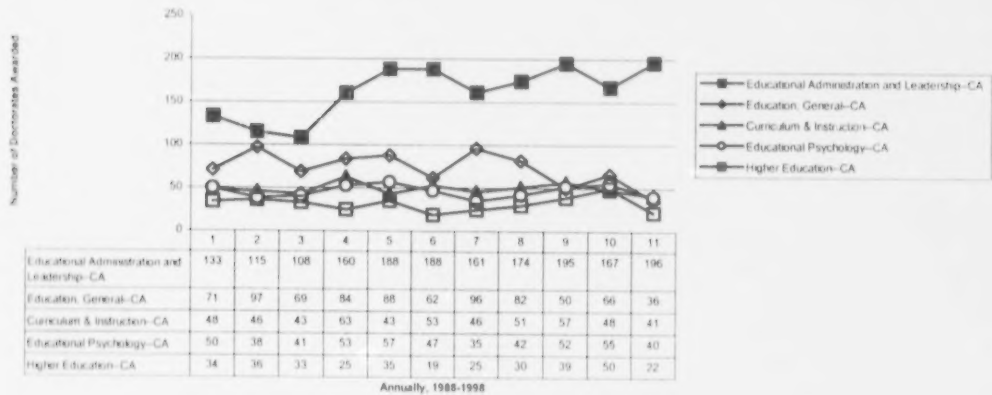


Figure B-11

Education Doctorates Awarded by California Institutions by Selected Specializations, 1988-1998

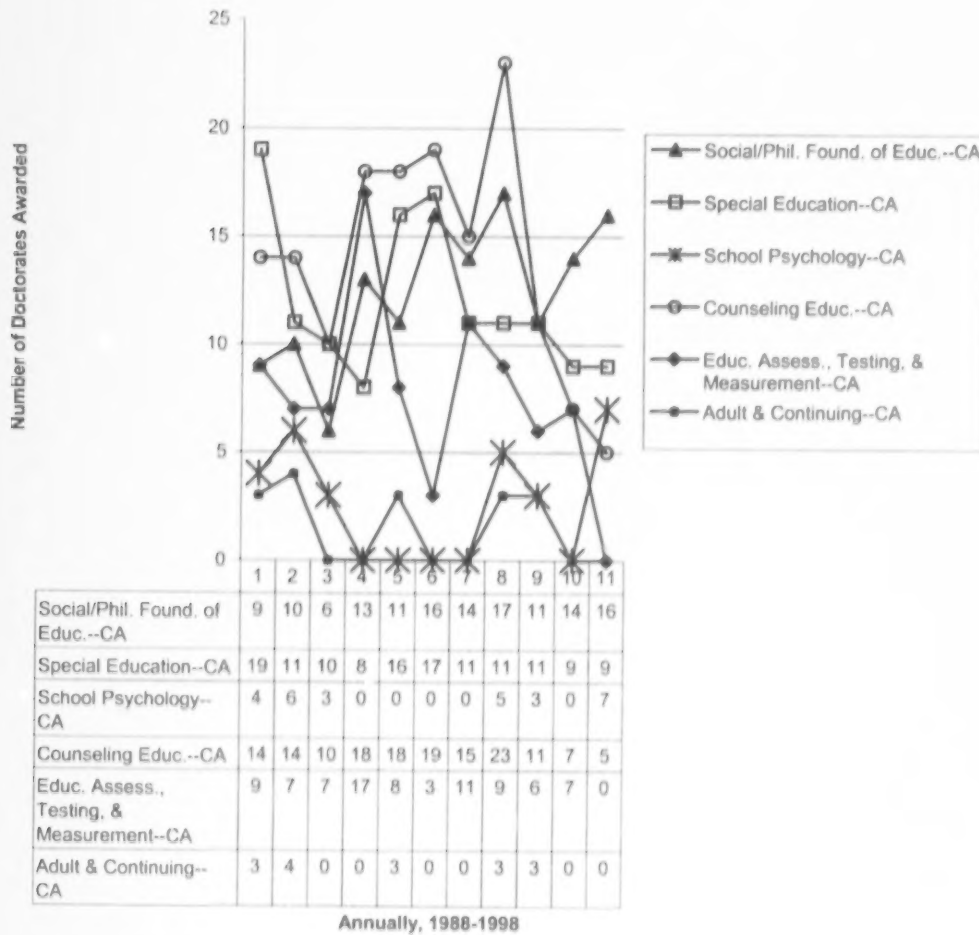
Source: National Opinion Research Center at the University of Chicago



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Figure B-12

Education Doctorates Awarded By California Institutions by Selected Specializations,
1988-1998



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Figure B-13

Median Number of Years from Baccalaureate to Education Doctorate and Registered Time for
Selected Years, California Institutions

Source: National Opinion Research Center at the University of Chicago

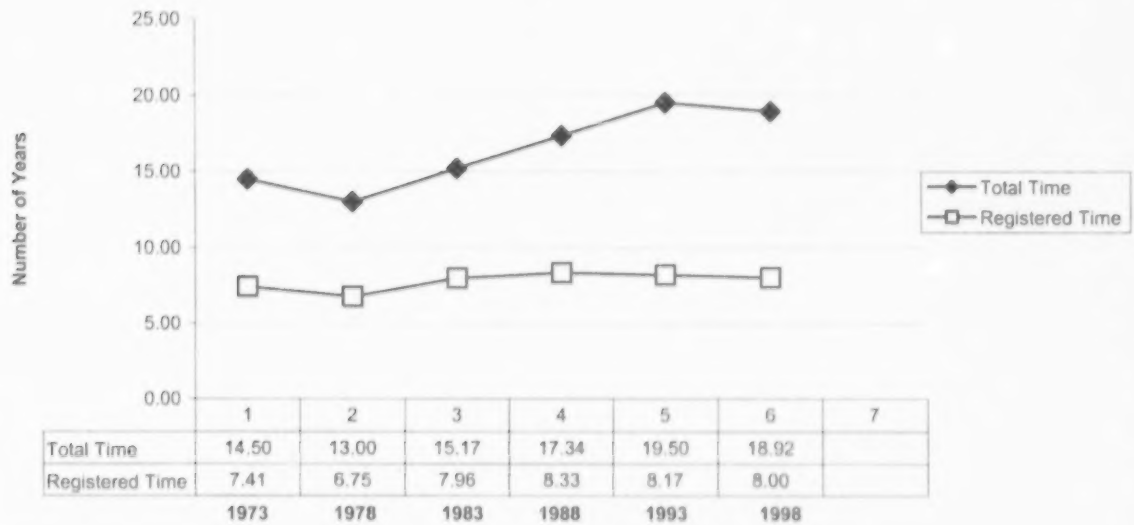


Figure B-14

Education Doctorates Awarded by California Institutions, 1998

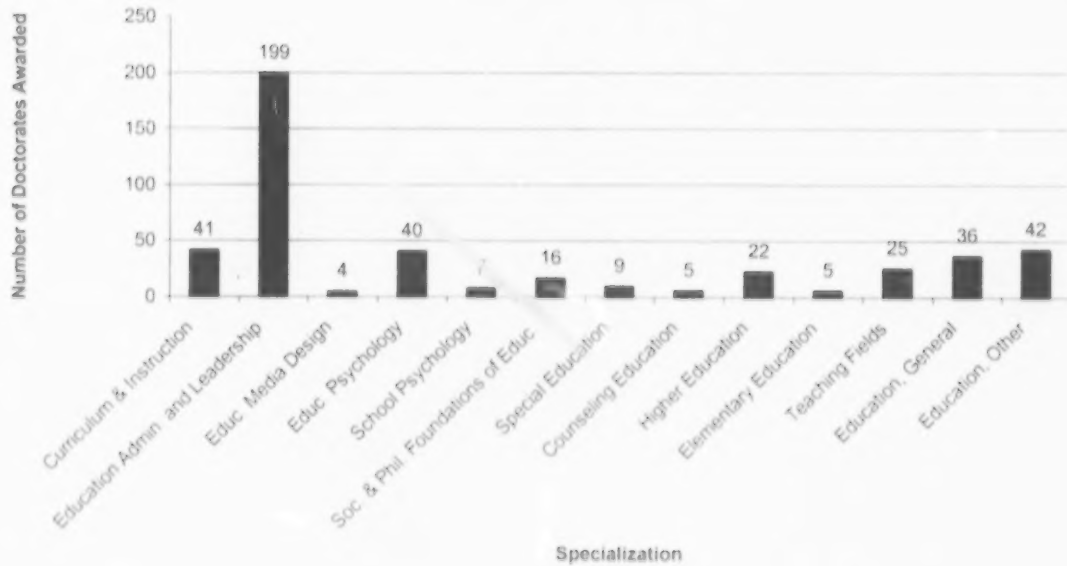
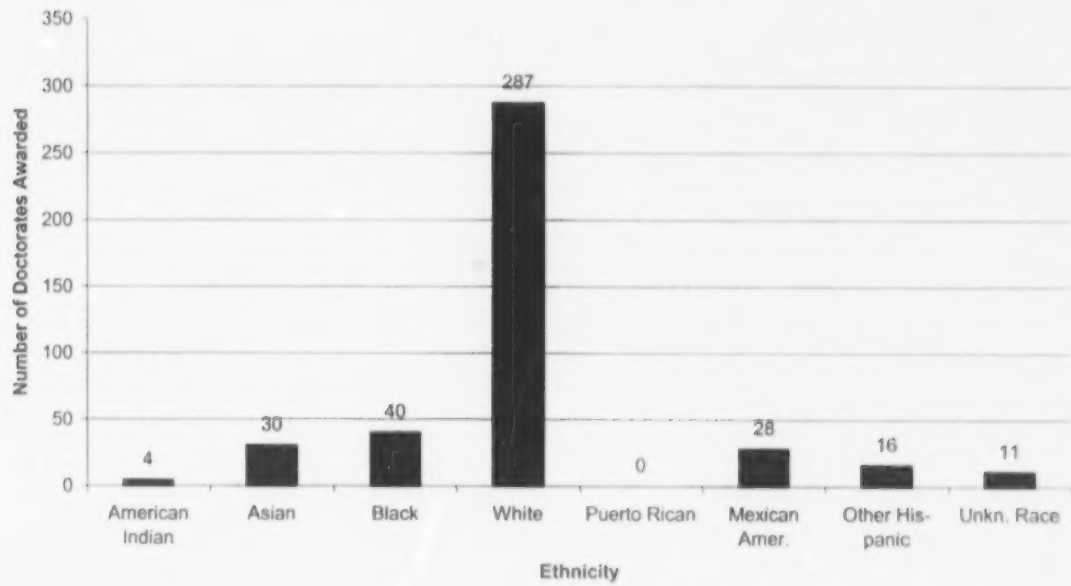


Figure B-15

Doctorates Awarded by California Institutions, 1998, by Ethnicity



Appendix C

Comparing California and the Nation -- Production and Characteristics of Education Doctorates

In this chapter we compare the production and characteristics of education doctorates in California with those of the nation.

Production of Education Doctorates

We have comparable data for the production of education doctorates from 1988 to 1998 from the federal *Survey of Earned Doctorates*. The data are for U.S. citizens and persons with permanent resident visas, and the national data includes California.

As shown in Figure C-1, from 1988 to 1998 there were small increases in the production of education doctorates in both California and the nation, with California having a slightly greater increase during the decade (8.9% vs. 5.5% for all education doctorates excluding Teaching Fields).

However, K-12 enrollment per doctorate awarded is much higher in California than in the nation, and it grew significantly more in the state than in the nation as a whole during the decade (see Figure C-2). There was a 17.1% increase in enrollment per doctorate (an increase of more than 2,000 students) in California compared to a 9.9% increase in the nation. This occurred because even though the growth of doctorates was greater in California during the period, enrollment increased 28% in the state and "only" 16% in the nation. In 1998, there were 14,685 K-12 students for every doctorate produced in California compared to 9,438 in the nation.

Figure C-3 highlights the production of doctorates in Education Administration and Leadership. From 1988 to 1998 California's production of doctorates in Administration and Leadership grew more than twice as fast (47.4% vs. 21.1%) as that of the nation. In California, the growth in the Administration & Leadership offset declines in many of the other specializations.

Figures C-4 and C-5 depict national and state trends in the production of doctorates in seven specializations. Generally, both California and the nation are flat to slightly down in these fields during the period under study.

Characteristics of Recipients of Education Doctorates in 1998

In the federal *Survey of Earned Doctorates*, education doctorates in the class of 1998 had the highest median age at receipt of degree (44.8 years) among thirty disciplines. Recipients of doctorates in other applied professional fields also were older than those in academic disciplines, but they were slightly younger than the educators, with Health at 40.8 years, Business and Management at 36.5, and Other Professional Fields at 39.9.

Table C-1 compares the age of education doctorates in California and the nation, by age group. What is most striking is how “elderly” the doctorates are, nearly half being over 45—not too far from “early” retirement age. Also interesting is how few young (under 31) doctorates there are in education (about 5%). The table shows that the age profile of education doctorates is very similar for the nation and the state.

The reason education doctorates are relatively old when they attain their degree is not that it takes them a long time to earn the degree once they have registered in a program (median time registered in education is 8.4 years compared to 7.6 years for all other disciplines), it’s that they often do not enroll until many years after they have earned their baccalaureate. The median total time from baccalaureate to education doctorate was 18.9 years in 1998 in California, compared to 20.0 years for the nation, as shown in Table C-2. In terms of registered time, there are no great differences between California and the nation.

Table C-3 displays various characteristics of the education doctorate class of 1998. There are few striking differences between the state and the nation. In both cases, females received more than 60% of education doctorates in that year.

The most interesting difference shown in Table 5-3 is that Californians are less likely to have an undergraduate major in education than the nation. Eighty percent of women and 88% of men in California earned a baccalaureate in a field other than education, while the comparable figures for the nation are 62% and 70%.

Table C-3 also compares the percentage of education doctorates who have employment plans in educational institutions, government agencies, nonprofit organizations, and industry and business. A slightly higher percentage of doctorates nationwide than in California (60.9% compared to 54.2%) planned to work in educational institutions.

Table C-1

Distribution of 1998 Education Doctorate Recipients by Age at Doctorate
California and the Nation

	Age Grouping										
	26-30		31-35		36-40		41-45		Over 45		Total
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	
California Doctorates	18	4.9%	55	14.9%	66	17.9%	60	16.3%	170	46.1%	369
Nation Doctorates	288	5.4%	680	12.8%	810	15.2%	992	18.6%	2557	48.0%	5327

Source: NSF/NIH/USED/NEH/USDA/NASA, Survey of Earned Doctorates

CPEC NSF Table 18 age at doctorate 1998

Table C-2

Median Number of Years from Baccalaureate to Education Doctorate, 1998
California Institutions and the Nation

<u>Demographic Group</u>	<u>Total Time</u> <u>from Baccalaureate</u>		<u>Registered Time</u> <u>from Baccalaureate</u>	
	<u>California</u>	<u>Nation</u>	<u>California</u>	<u>Nation</u>
All Education Doctorates	18.9	20.0	8.0	8.4
Male	17.4	18.9	8.0	8.4
Female	19.5	20.6	8.0	8.4
US Citizenship	19.4	21.0	8.0	8.6
Non-U.S., Permanent Visa	13.2	14.3	7.5	8.3
Non-U.S., Temporary Visa	11.8	12.5	7.3	7.0
Unknown	11.0	16.2	na	8.8
Asians	16.5	16.0	7.4	8.2
Blacks	19.5	21.0	8.6	8.0
Hispanics	19.5	18.9	7.9	9.0
American Indians	19.9	16.3	6.7	8.3
Whites	19.4	21.0	8.1	8.7

Source: NSF/NIH/USED/NEH/USDA/NASA, Survey of Earned Doctorates
 CPEC NSF Table 17 years to doctorate

Table C-3

Statistical Profile of Education Doctorates, 1998
California and the Nation

	<u>Total</u>		<u>Males</u>		<u>Females</u>	
	<u>California</u>	<u>Nation</u>	<u>California</u>	<u>Nation</u>	<u>California</u>	<u>Nation</u>
PART I.						
Number of Respondents	457	6559	154	2422	301	4120
Male	33.7%	36.90%	100.0%	100.0%		
Female	65.9%	62.8%			100.0%	100.0%
US Citizenship	88.6%	84.3%	85.1%	81.4%	90.7%	86.3%
Non-U.S., Permanent Visa	2.8%	2.6%	2.6%	2.9%	2.7%	2.4%
Non-U.S., Temporary Visa	4.4%	6.5%	6.5%	8.6%	3.3%	5.2%
Unknown	4.2%	6.6%	5.8%	7.1%	3.3%	6.1%
BA in different field from PHD	82.9%	65.0%	88.3%	70.1%	80.1%	61.9%
BA in same field as PHD	17.1%	35.0%	11.7%	29.9%	19.9%	38.1%
Does not have masters degree	17.1%	12.3%	20.1%	22.8%	15.6%	21.7%
Has masters degree	82.9%	87.7%	79.9%	87.2%	84.4%	88.3%
Postdoc study plans	6.6%	4.7%	2.6%	4.6%	8.3%	4.7%
Postdoc employment plans	76.8%	80.5%	80.5%	80.3%	75.1%	80.8%
Postdoc plans unknown	16.6%	14.9%	16.9%	15.0%	16.6%	14.5%
<u>Study Plans</u>						
Fellowship	2.6%	1.8%	1.3%	1.7%	3.3%	1.9%
Research Assoc	2.4%	1.6%	1.3%	1.7%	3.0%	1.5%
Traineeship	0.9%	0.6%	0.0%	0.7%	1.0%	0.5%
Other Study	0.7%	0.6%	0.0%	0.5%	1.0%	0.7%
<u>Employment Plans</u>						
Elementary or Secondary School	20.1%	na	18.2%	na	21.3%	na
Junior or Community College	6.1%	na	6.5%	na	6.0%	na
Other Educ. Institution	28.0%	na	32.5%	na	25.9%	na
Subtotal	54.2%	60.9%	57.2%	60.9%	53.2%	61.1%
Industry/Business	6.6%	6.1%	7.8%	6.9%	6.0%	5.6%
Government	1.8%	3.4%	2.6%	3.9%	1.3%	3.1%
Nonprofit	4.2%	3.9%	5.2%	3.9%	3.7%	4.0%
Other/Unknown	10.1%	6.2%	7.8%	4.8%	11.0%	7.0%
Definite Postdoc. Study	4.2%	2.8%	1.9%	2.8%	5.3%	2.8%
Seeking Postdoc. Study	2.4%	1.9%	0.6%	1.9%	3.0%	1.9%
Definite Employment	52.7%	59.2%	55.2%	63.0%	51.5%	58.3%
Seeking Employment	24.1%	21.3%	25.3%	19.4%	23.6%	22.5%

PART II

Number of Respondents

Primary Activity

Research & Development

Teaching

Administration

Prof. Services

Other

Secondary Activity

Research & Development

Teaching

Administration

Prof. Services

Other

No Secondary Activity

Activity(ies) Unknown

Table C-3 (cont.)

241	3881	85	1477	155	2402
8.7%	5.3%	10.6%	5.1%	7.7%	5.4%
30.7%	40.2%	32.9%	37.2%	29.7%	42.1%
44.4%	39.2%	45.9%	44.3%	43.9%	36.1%
8.7%	11.3%	7.1%	9.4%	9.0%	12.3%
1.2%	1.0%	1.2%	0.9%	1.3%	1.1%
23.2%	26.2%	20.0%	25.9%	24.5%	26.4%
27.8%	22.7%	32.9%	26.3%	25.2%	20.5%
10.8%	13.5%	11.8%	13.8%	10.3%	13.3%
14.5%	19.2%	15.3%	17.7%	14.2%	20.1%
1.2%	1.1%	1.2%	0.9%	1.3%	1.3%
16.2%	14.4%	16.5%	12.6%	16.1%	15.5%
6.2%	2.9%	2.4%	2.8%	8.4%	2.9%

na = not available

Source: NSF/NIH/USED/NEH/USDA/NASA, Survey of Earned Doctorates

CPEC NSF Table A3 Statistical Profile of doctorates cut up versions

Figure C-1
Education Doctorates Awarded in California and the Nation, 1988-98
 Source: National Opinion Research Center at the University of Chicago

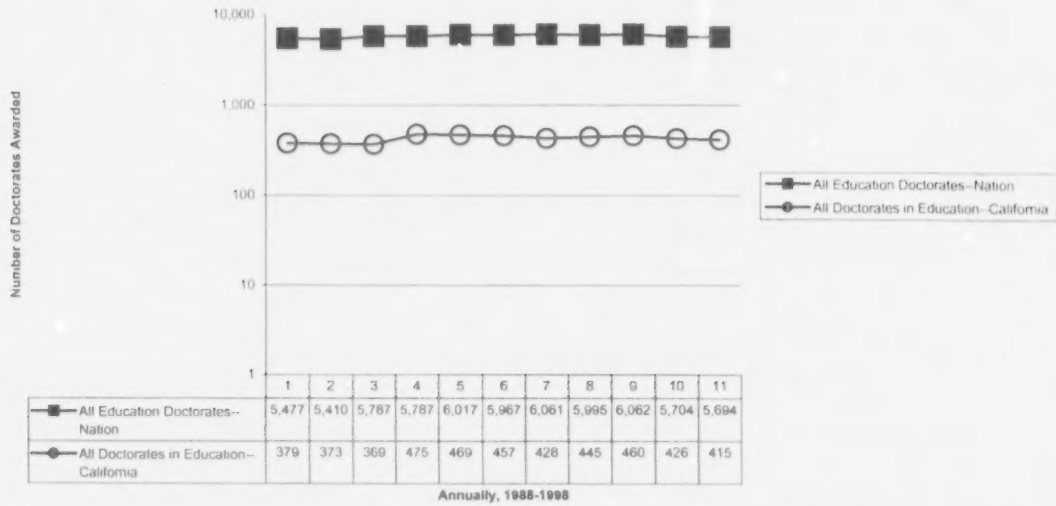
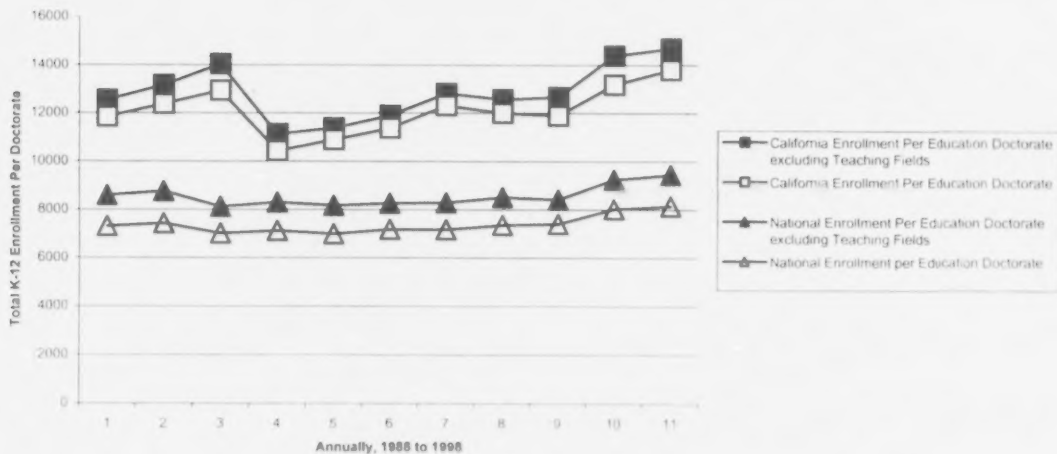


Figure C-2
Enrollment Per Education Doctorate Awarded by California and United States Universities, 1988 to 1998
 Source: National Opinion Research Center at the University of Chicago



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Figure C-3

Doctorates Awarded in Education Administration/Leadership, 1988-1998, California and the Nation

Source: National Opinion Research Center at the University of Chicago

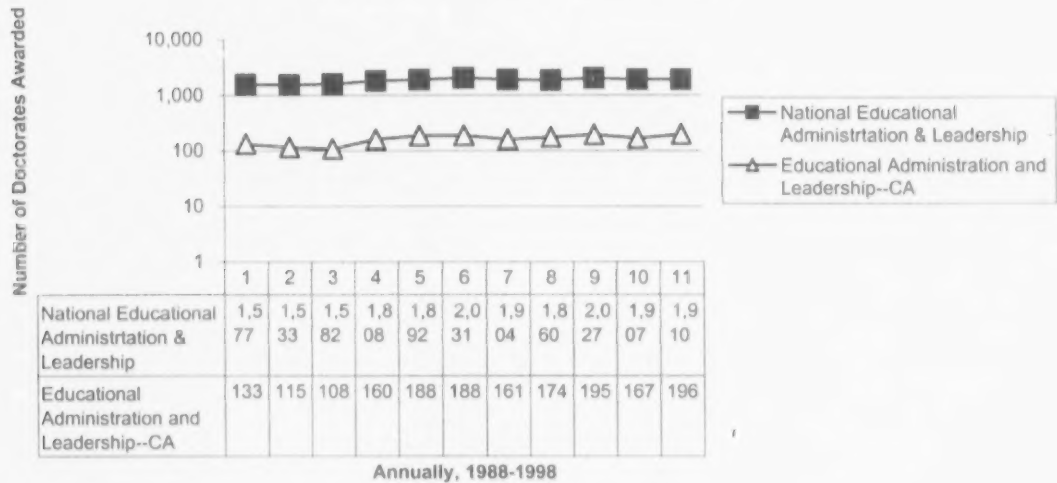
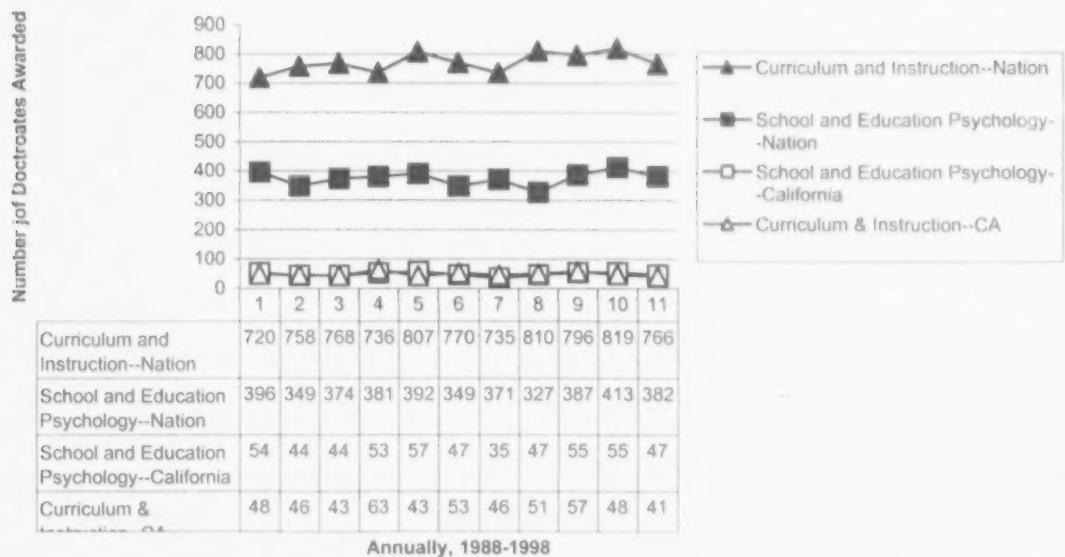


Figure C-4

Doctorates Awarded in Curriculum & Instruction and School & Educational Psychology, 1988-1998, California and the Nation

Source: National Opinion Research Center at the University of Chicago



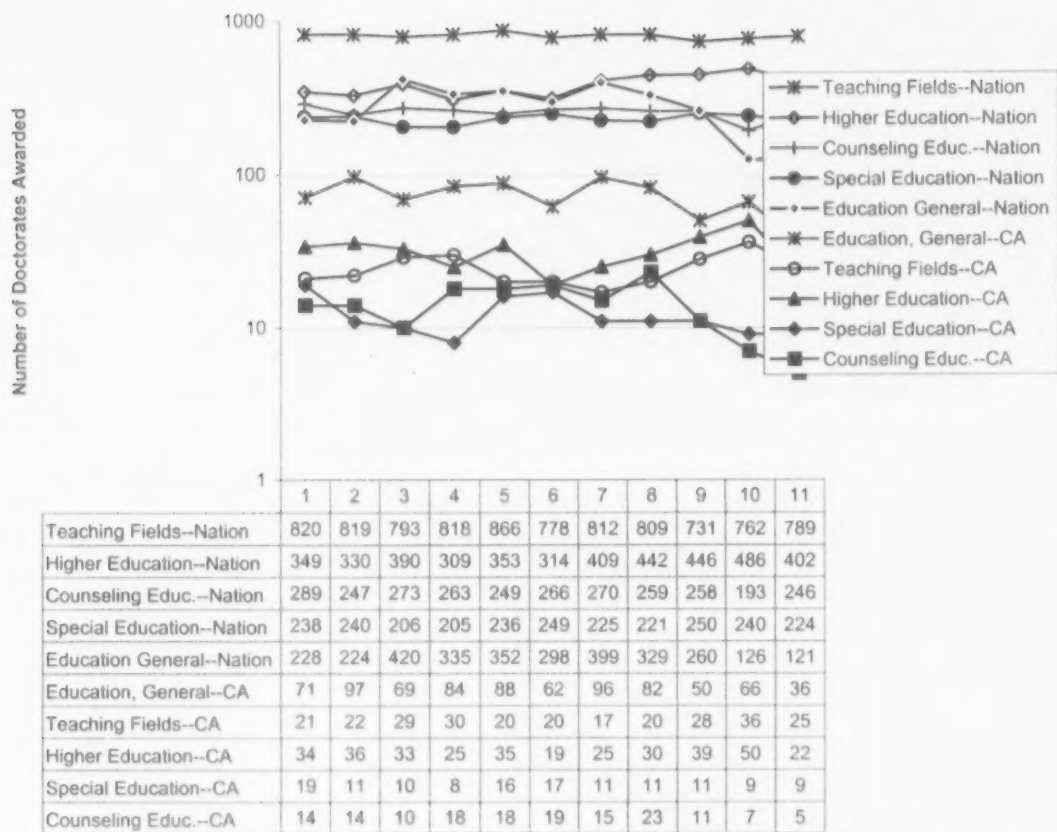


Figure C-5. Doctorates Awarded in Selected Specializations, Annually 1988-1998

Appendix D

Employment of Doctorates in the Public Schools of California

In this chapter we examine the employment of persons with doctorates in the public schools of California, answering questions concerning the number of doctorates, where they work, what they do, and their ethnicity and gender.¹ The data are from the California Basic Educational Data System (CBEDS) for the fall of 1998.

Overview of Doctorates in the Public Schools

Distribution among positions. Only 1.6% of educators employed in the public schools of California possess a doctorate (see Table D-1). This amounts to slightly more than 5,000 of 327,000 teachers, pupil services personnel, and administrators.

More than half (57.6%) of the persons employed in the public schools who possess a doctorate work directly with students in schools. Teachers have 44.0% of the doctorates, while pupil services personnel (counselors, nurses, librarians, and others) hold 13.6%.

Persons in leadership positions hold 42.4% of all doctorates. Seven and 4/10ths percent of the doctorates are Superintendents, 19.4% are central office administrators below the rank of superintendent, 10.9% are principals, and 4.9% are school administrators who report to a principal.

In sum, only a small percentage of educators in the public schools have doctorates, and most of those (nearly three out of four) work at school sites as teachers, pupil services personnel, principals, and vice-principals.

Position holders who have doctorates. Nearly half (343 persons, amounting to 48.0%) of all superintendents possessed a doctorate in the fall of 1998 (see Table D-1).² In sections below, we will look at their distribution in terms of gender, ethnicity, location, and district size.

Among the next in command—the 341 deputy and associate superintendents—nearly three out of ten were holders of the highest academic degree.

In the ranks of certificated central-office administrators—which number nearly 7,000 statewide—we find the largest group of persons holding doctorates, 869 individuals, but this is only 12.5% of the category. Below, we will examine the occupations of these administrators in greater detail.

¹ The terms “employment,” “demand,” and “utilization” are used interchangeably in this report to refer to the number of persons with doctorates who are employed in the public schools.

² Superintendents in small districts who serve as both superintendent and principal, who are not counted among “full-time” superintendents, numbered 306 in 1998-99. Of these, only 12.7% held a doctorate.

Among principals, only 7.8% of the 7,220 principals in the CBEDS data base were possessors of a doctorate degree. Below, we will compare the prevalence of doctorates in elementary and secondary schools.

The Occupations of Central Office Administrators with Doctorates

Distribution among positions. CBEDS data differentiate between two types of central office administrators: those with general administrative assignments and those with specific program or subject area assignments. Since individual administrators across the state decide in which occupational category they are classified, there may be a considerable lack of uniformity in assignments. Also, in small and medium-sized districts, one administrator often covers several assignments, making classification difficult—in fact, 30% (1,244) of subject area administrators assigned themselves to the category “administrators of other subjects and programs (including combinations of those listed).”

The majority of central office administrators with doctorates are found in only five of the fifty-five occupational categories (see Table D-2). Many occupations have fewer than ten incumbents statewide holding a doctorate, and ten occupations have zero position holders with a doctorate. Administrators of instruction and curriculum services (19.3%), special education (11.0%), staff personnel services (9.7%), pupil personnel services (8.2%), and federal/state funded programs (7.2%) together possess 55.4% of the 869 doctorates. This is not particularly surprising because these five positions are by far most numerous in school districts.

Doctorates as a percentage of position holders. Administrators of compensatory education and of program evaluation and research have the highest percentages of incumbents possessing the doctorate (see Table D-2). The connection between doctoral training and research and evaluation is obvious, but it is not so clear why more than half the compensatory education administrators hold the highest academic degree while heads of bilingual education, staff development, reading instruction, and other important functions hold relatively few doctorates.

While only 12.5% of central office administrators below the rank of deputy or associate superintendent have a doctorate, in the three key positions of “Assistant Superintendent for Instruction,” “Assistant Superintendent for Personnel,” and “Assistant Superintendent for Pupil Personnel Services,” between 1/5 and 1/4 of the incumbents have an earned doctorate. Slightly less than 20% of the heads of special education have doctorates.

One might expect substantial numbers of doctorates in important leadership posts such as heads of bilingual education and staff development, but only 1 in 12 in the former position and 1 in 8 in the latter hold doctorates.

In the categories of program and subject area administration in which incumbents oversee a combination of programs and/or subjects, the percentage of persons with a doctorate is low (for example, only 3.1% of 1,244 multiple-subject-area administrators had a doctorate in 1998-99). These persons with multiple responsibilities are usually found in small districts, which we examine in detail later.

Gender and Ethnicity of Doctorates

Now we look at the ethnicity and gender of persons holding the doctoral degree in three categories of personnel: superintendents, all other central office administrators (including deputy and associate superintendents), and principals.

Superintendents. Table D-3 reveals that female and male superintendents are about equally likely to possess a doctorate. 50.8% of female superintendents have a doctorate, while the corresponding figure for males is 46.5%. (In earlier chapters we have seen that the graduation of female doctorates has increased dramatically over the past twenty years.) The parity between males and females in the possession of a doctorate persists across three of the four large ethnic groups (White, African American, and Asian)—but Hispanic female superintendents include 2/3 with doctorates, while only 39.1% of Hispanic male superintendents have earned the doctoral degree.

Comparing the prevalence of doctorates across ethnicities, Asian superintendents stand out in that substantially fewer have doctorates compared to other large ethnic groups, but the total number of Asian superintendents is less than 20.

While the percentages are not displayed in Table D-3, the data clearly show the disproportionately (compared to student enrollment) high percentage of Whites holding superintendencies throughout the State: 86.8% of superintendents are White, 7.7% are Hispanic, 2.7% are Asian, and 1.4% are African American. The percentages of superintendents who are American Indian, Filipino, or Pacific Islander virtually defy measurement. One can also derive from Table D-3 that 74.7% of all superintendents are male.

District Administrators. About 50% more male district administrators have a doctorate than female administrators (16.3% versus 11.0%—see Table D-4). This contrasts with the almost equal incidence of doctorates in the superintendency. The greater prevalence of doctorates among male district administrators holds for all ethnicities except Filipinos.

Notwithstanding the difference in percentages just revealed, there are actually more female district administrators possessing a doctorate than male (500 versus 451). This is because female district administrators greatly outnumber male administrators (4,527 to 2,772), and they outnumber them in every ethnic group except Pacific Islander (where there is a 6 to 6 tie).³

Looking across ethnicities in Table D-4, we can see first of all that there are 772 White central office administrators who hold the doctorate, 75 Hispanics, 64 African -Americans, 19 Asians, and fewer than 10 American Indians, Filipinos, and Pacific Islanders. While 14.2% of White central office administrators hold doctorates, only 9.1% of Hispanics and 10.1% of African-Americans possess the doctoral degree. We also find that as with superintendents, Asian administrators hold significantly fewer doctorates (6.9%) than the other ethnic groups.

Table D-5 addresses the question of whether there are differences between genders in the occupational positions which doctorates hold. The Table shows that there are eight positions in which 68.8% of females with doctorates are employed and in which 71.8% of males with

³ All other things being equal, to the extent that districts prefer a superintendent who possesses a doctorate, we would expect the ranks of female superintendents to increase in the future.

doctorates are employed. Female doctorates are much more likely to head-up instruction/curriculum than male doctorates; while male doctorates are more likely to be deputy or associate superintendents or be in charge of staff personnel. Male doctorates are more evenly distributed across the key administrative posts than female doctorates who gravitate toward instruction/curriculum and special education.

Table D-6 makes a similar comparison across ethnicities. Asians with doctorates are more likely than members of all three other major ethnic groups to hold the positions of deputy/associate superintendent, head of curriculum/instruction, and head of federal/state programs; at the same time, they are less likely than whites to be in posts in pupil personnel, staff personnel, and special education.

Doctorates in all three major minority groups are not prevalent in special education; and Asian and Hispanic doctorates are less likely than African-Americans and Whites to be in a pupil-personnel post. Not surprisingly, Hispanics and Asians are employed in Bilingual education positions at a higher rate than Whites and African-Americans.

Table D-7 displays the percentage of doctorates in administrative positions by gender within ethnicity (percentages are shown only for positions in which at least 5% of the ethnic/gender group holds the administrative position). The following observations stand out:

- The totals at the bottom of Table D-7 show only 8 male Asians and 21 male African-Americans with doctorates in central office administrative positions. There are more than twice as many female African-Americans with doctorates (43) in central office posts than male African-Americans.
- In contrast, Hispanic males with doctorates outnumber Hispanic females 43 to 32 in central office administrative positions.
- 45.5% of female Asian doctorates (5 in number) head-up instruction/curriculum.
- 37.5% of male Asian doctorates (3) are in deputy or associate superintendent positions and 50% (4) administer federal/state programs.
- The data show no Hispanic or African-American males in the position of administrator of curriculum and instruction. But 14.3% of male African-Americans who have a doctorate are in regional administration positions (a much higher percentage than any other group).
- 25.6% of female African-Americans with doctorates are in positions that administer combinations of program and subject areas. This contrasts with all other gender/ethnic groups for which the percentages are less than 5%.
- Except for male African-Americans, both male and female minorities have higher percentages than Whites in deputy or associate superintendent positions.
- White doctorates of both genders are much more highly represented in special education than the other groups.
- Hispanic and Asian women are more often found in Bilingual education than their male counterparts.

Principals. Of the 7,218 principals in the fall of 1998, 73% were White, 13% were Hispanic, 8% were African-American, 3% were Asian, and less than 2% were American-Indian, Filipino, or Pacific Islander. Women outnumbered men by 4,005 to 3,213 in total principalships, and women principals outnumbered males in all ethnic groups except Filipino (where there were

equal numbers). Hispanic males almost equaled the number of Hispanic females in the position of principal (457 versus 473).

Table D-8 displays the number and percentage of doctorates held by principals by ethnicity and gender. The key observations are as follows:

- Only 7.8% of principals have a doctorate.
- Overall, male principals have a higher percentage of doctorates than female principals (8.2% compared to 7.4%). But there are 298 female principals with doctorates compared to 265 males.
- Among the large ethnic groups, Asian (8.8%) and African-American (8.7%) principals have a higher percentage of doctorates than White (7.9%) and Hispanic principals (5.6%).
- Among males in the large ethnic groups, Hispanics have the fewest doctorates (4.8%), while African-Americans have the highest rate (9.3%). Among females, Asians have the highest rate (8.9%) and Hispanics have the lowest percentage (6.3%).
- Among the ethnic groups with relatively small populations, two of the three Pacific Islander principals have doctorates, 18% of the 49 American-Indian principals have doctoral degrees, and only 2 of the 46 Filipino principals possess a doctorate.

Doctorates by School District Location and Size

In this section we examine the incidence of doctorates by school district location and by school district size. Counties were classified by region and school districts were classified by size as shown in the textbox.

Regions and District Sizes

Regions (counties)

Urban South: Los Angeles, Orange, San Diego

Urban North: Alameda, Contra Costa, Sacramento, San Francisco, San Mateo, Santa Clara

Suburban North: El Dorado, Marin, Napa, Placer, Solano, Sonoma, Yolo

Southeast: Imperial, Riverside, San Bernardino

Central Coast: Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz, Ventura

Central Valley: Fresno, Kern, Kings, Merced, San Joaquin, Stanislaus, Tulare

Rural North: Butte, Colusa, Del Norte, Glenn, Humboldt, Lake, Lassen, Mendocino, Modoc, Nevada, Plumas, Shasta, Sierra, Siskiyou, Sutter, Tehama, Trinity, Yuba

Rural Mountains: Alpine, Amador, Calaveras, Inyo, Madera, Mariposa, Mono, Tuolumne

District Sizes

Less than 2,500, 2,500 to 4,999, 5,000 to 9,999, 10,000 to 19,999, 20,000 to 39,999, 40,000 and more, County Offices.

We first consider superintendents, then central office administrators, and finally principals.

Superintendents. Table D-9 shows the number of superintendents and the percentage who possess a doctorate by district size and region.

For the most part, the larger the school district the more likely it will have a superintendent who holds a doctorate. In very small districts (less than 2,500 pupils) and small districts (2,500 to 4,999 pupils), less than half the superintendents have a doctoral degree. In the very small districts, only about a third of the superintendents have a doctorate.

The data reveal that in districts with between 5,000 and 9,999 students, there is a higher percentage of superintendents with doctorates than in districts with 10,000 to 19,999 pupils. This anomaly can be traced to the Urban North, the Central Coast, and the Central Valley, where the 5K-10K district superintendents have a higher percentage of doctorates than those in the 10K-20K districts. Particularly, in the Urban North, only 21% of the superintendents of districts between 10,000 and 19,999 have doctorates while 64% of those in the smaller districts have the advanced degree.

The expected pattern of a positive relationship between school district size and the likelihood that the superintendent will possess a doctorate resumes with districts in the 20,000 to 39,999 range. Here, 67.4% of superintendents possess the doctorate—the highest rate of all the size categories.

In the largest size category, in which there are only 12 districts, the rate falls to 58.3%. Again, the Urban North bucks the trend in that only one of its five superintendents in districts over 40,000 holds a doctoral degree.

Turning now to a comparison of regions, the incidence of doctorates among superintendents is definitely lower in three regions: the Central Valley, the Rural North, and the Rural Mountains. But this is primarily due to the large number of small districts in those regions, and secondarily to the fact that small districts in most of the other regions of the State tend to have more superintendents with doctorates. For example, the Central Valley has 74 districts with fewer than 2,500 pupils and only 27% of these districts have superintendents with doctorates, while the Urban South has only 18 districts under 2,500 but 50% of these districts have a superintendent with a doctoral degree. In the Central Valley and Rural North, the incidence of doctorates is closely related to school district size: as examples, in the five districts in the Central Valley with between 20,000 and 40,000 pupils, 83% of the superintendents have a doctorate; in the Rural North, the incidence of doctorates progresses from 22.2%, to 60%, to 80%, to 100% as size increases.

The Central Valley, Rural North, and Rural Mountains also have significantly fewer county office superintendents with the doctorate. Each of these regions is in the low 40% range, while the other regions have from 50% to 100% of county superintendents with a doctoral degree.

The Suburban North, Southeast, and Central Coast have about the same percentages of doctorates in the superintendency. And in the Suburban North and Southeast the relationship between size and doctorates is very strong.

The Urban South has by far the highest percentage of superintendents with the doctorate. The Urban North is highly irregular in the employment of doctorates in the three size categories between 10,000 and over 40,000. The Central Coast is also highly irregular across the entire spectrum of district sizes.

Superintendent-Principals. Small districts often have a leader who doubles as both superintendent and principal. Table D-10 shows the percentage of superintendent-principals with a doctorate by region and district size. There are several large districts whose chief executive officers are coded as superintendent-principals in the CBEDS data base—these are probably coding errors.

Compared to “full-fledged” superintendents, relatively few superintendent-principals hold a doctorate—only about one in eight possesses the advanced degree. In the Rural North, only 4.5% of the superintendent-principals in 89 very small districts have a doctorate.

Central Office Administrators. Of the 7,300 central office administrators (including deputy and associate superintendents) in the CBEDS data base, 13% possess a doctorate as shown in Table D-11. Interestingly, both very small districts and very large districts have significantly lower percentages than the four middle-sized categories.

- Very small districts in the Southeast, Central Coast, Central Valley, and Rural North have substantially lower percentages of doctorates than the other regions—and, according to the CBEDS data, 102 very small districts in the Central Coast and Rural North regions have no doctorates in central office administrative positions.
- The districts with more than 40,000 pupils in the Urban South and the Urban North also have low percentages of district administrators with doctorates. These large districts have large numbers of administrators, but relatively few possess a doctorate.

The relationship between district size and the percentage of persons with doctorates is not as straight forward for central office administrators as it is for superintendents. For the State as a whole, districts with 10,000 to 19,999 have the highest percentage of central office leaders with doctorates. However, the high point varies substantially among regions.

Another way to look at the data is in terms of central office administrators with doctorates per district. Perhaps every district should have a minimal representation of persons with an advanced degree in education. Table 6-12 shows the number of doctorates per district in each of the size categories.

Table D-12

Central Office Administrators with Doctorates by Size of District

<u>District Size</u>	<u>Number of Districts</u>	<u># of Central Office Office Administrators with Doctorate</u>	<u># of Central Office Admini- strators with Doctorate Per District</u>
< 2,500	495	32	0.07
2,500-4,999	134	82	0.61
5,000-9,999	134	158	1.18
10,000-19,999	87	195	2.24
20,000-39,999	57	170	2.98
40,000 +	13	142	10.92
County Offices	58	173	2.98

As shown in Table D-12, the 13 largest districts have many more central office administrators with doctorates than the other districts. Districts with less than 5,000 students have relatively few "doctoral resources."

County offices of education in the urban areas (South and North) have significantly higher percentages of doctorates than COEs in other regions. In the Rural North, the incidence of doctorates among County Office of Education central office administrators is particularly low (only 4.5%--see Table D-11).

Principals. Of the 7,220 principals in the CBEDS data base, about one in 13 possesses a doctorate. For high school principals, the proportion is one in ten, and for elementary principals the rate is one in 14.

Table D-13 shows that the Urban South and the Southeast have substantially higher proportions of principals with doctorates than other areas of the State; and this is particularly true for high school principals. The Rural North and the Central Valley have the fewest doctorates, but the Central Valley ranks relatively high in the proportion of secondary principals who possess the highest degree.⁴ In the Rural Mountain region, relatively few elementary principals hold the doctorate, but the region has the highest percentage (16.7%) of high school principals possessing a doctorate.

⁴ In the CBEDS data base, a secondary school is defined as one that offers a high school diploma. All other schools are considered "elementary" schools.

Trends in the Employment of Doctorates

Table D-14 shows the trend in the employment of doctorates in the public schools of California over the fourteen years beginning in 1984-85. The key observations are as follows:

- Overall, as a percentage of administrators, there has been a substantial decline from 1984-85 to 1998-99 in holders of doctorates. In 1984-85, 12.7% of administrators had doctorates; by 1998-99, the percentage had dropped to 9.1% (a 28% decline). Significant declines are seen for deputy and associate superintendents, all other district administrators, principals, and other school site administrators. The percentage of superintendents who held the doctorate was steady over the period at 46% to 49%.
- Nevertheless, even though the percentage of administrators holding the doctorate fell, the number of doctorates employed in the public schools (1) rose slightly in several categories (superintendents, all other district administrators, and other site administrators), (2) rose substantially in the deputy and associate superintendent category (from 78 to 100), and (3) remained constant for principals (563). The percentage of administrators possessing a doctorate declined during this period because the number of administrators grew significantly in all the major employment categories. Overall, the number of administrators rose from 20,540 in 1990-91 to 24,020 in 1998-99, an increase of 17%.
- The percentage of pupil services personnel and teachers possessing a doctorate also declined slightly during the last decade, but the number of doctorates in each category rose slightly (the number of teachers increased from 220,732 to 283,166, resulting in the decline in the percentage with a doctorate).
- Finally, it should be noted that the number of persons with a doctorate in school district administrative posts changed only slightly during the nineties (2,122 in 1990-91 and 2,184 in 1998-99).

Table D-1

Doctorates By Position, 1998-99

<u>Position</u>	<u>Number of Position Holders</u>	<u>Number with a Doctorate</u>	<u>Percent of Position Holders with a Doctorate</u>	<u>Percent of All Doctorates</u>	<u>Percent of Doctorates in Subgroup</u>
<u>Administrators subgroup</u>					
Superintendent	714	343	48.0	6.6%	15.7%
Deputy or associate superintendent (general)	341	100	29.3	1.9%	4.6%
Superintendent-principal	306	39	12.7	0.8%	1.8%
All other certificated district administrators	59	869	12.5	16.9%	39.8%
Non-certificated district administrators	93	19	20.4	0.4%	0.9%
Principal	7,220	563	7.8	10.9%	25.8%
School site administrator (excluding principals)	8,387	252	3.0	4.9%	11.5%
Subtotal	24,020	2,184	9.1	42.4%	100.0%
<u>Direct Services Personnel subgroup</u>					
Full-time teaching principal or superintendent	88	1	1.1	0.0%	0.0%
Pupil Services Personnel	20,095	703	3.5	13.6%	23.7%
Teacher	283,166	2,265	0.8	44.0%	76.3%
Subtotal	303,349	2,970	1.0	57.6%	100.0%
Total	327,369	5,154	1.6	100.0%	
CPEC doctorates by assignment/sheet3					

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Table D-2

Doctorates by Administration Position, 1998-99

<u>Administration Position</u>	<u>Number of Position Holders</u>	<u>Number with a Doctorate</u>	<u>Percent of Position Holders with a Doctorate</u>	<u>Percent of All Doctorates in General Admini- strative Positions</u>	<u>Percent of All Doctorates in Administration</u>
<u>General Administration</u>			0.300338001		
Instructional/curriculum services	672	167	24.9	31.0%	19.3%
Staff personnel services	383	84	21.9	15.6%	9.7%
Pupil personnel services	309	71	23.0	13.2%	8.2%
Other central office services (including combina- tions of general administration services)	357	49	13.7	9.1%	5.6%
Program evaluation/research	91	37	40.7	6.9%	4.3%
Welfare and attendance	153	24	15.7	4.5%	2.8%
Finance/business	116	23	19.8	4.3%	2.6%
Staff Development	170	21	12.4	3.9%	2.4%
Assistant administrator/consultant for services of general administration	151	12	7.9	2.2%	1.4%
Region/area administrator	55	9	16.4	1.7%	1.0%
Administrative assistant (general)	46	7	15.2	1.3%	0.8%
Library/media services	62	6	9.7	1.1%	0.7%
Integration/desegregation	54	5	9.3	0.9%	0.6%
Proficiency/competency exams	19	5	26.3	0.9%	0.6%
Media services	26	5	19.2	0.9%	0.6%
Government relations/legal services	22	4	18.2	0.7%	0.5%

Public relations/information	24	3	12.5	0.6%	0.3%
Data processing	27	3	11.1	0.6%	0.3%
Health/medical services	34	3	8.8	0.6%	0.3%
Union representative	40	1	2.5	0.2%	0.1%
Food services	2	0	0.0	0.0%	0.0%
Transportation	4	0	0.0	0.0%	0.0%
General Administration Subtotal	2817	539	19.1	100.0%	62.0%
Special education	551	96	17.4%	29.1%	11.0%
Federal/State funded programs (general)	574	63	11.0%	19.1%	7.2%
Other program/subject areas (incl. combinations)	1244	39	3.1%	11.8%	4.5%
Bilingual education	221	19	8.6%	5.8%	2.2%
Compensatory education	29	16	55.2%	4.8%	1.8%
Alternative education	117	16	13.7%	4.8%	1.8%
Other programs (including combinations)	145	12	8.3%	3.6%	1.4%
Technology coordinator	225	11	4.9%	3.3%	1.3%
Secondary	53	10	18.9%	3.0%	1.2%
Elementary	81	8	9.9%	2.4%	0.9%
Science	24	5	20.8%	1.5%	0.6%
Assistant Administrator/consultant for program or subject area administration	179	5	2.8%	1.5%	0.6%
Gifted and talented	53	4	7.5%	1.2%	0.5%
Art/music	54	4	7.4%	1.2%	0.5%
Social sciences	8	3	37.5%	0.9%	0.3%
Vocational education	64	3	4.7%	0.9%	0.3%
Reading/language arts	178	3	1.7%	0.9%	0.3%
Continuation education	9	2	22.2%	0.6%	0.2%
Physical education	23	2	8.7%	0.6%	0.2%

Independent study	23	2	8.7%	0.6%	0.2%
Environmental education	24	2	8.3%	0.6%	0.2%
Health	36	2	5.6%	0.6%	0.2%
School Improvement	42	1	2.4%	0.3%	0.1%
Mathematics	42	1	2.4%	0.3%	0.1%
Athletics	45	1	2.2%	0.3%	0.1%
Homemaking education	5	0	0.0%	0.0%	0.0%
Foreign languages	4	0	0.0%	0.0%	0.0%
Driver training	3	0	0.0%	0.0%	0.0%
Instructional television	4	0	0.0%	0.0%	0.0%
Year-round schools	2	0	0.0%	0.0%	0.0%
Summer schools	9	0	0.0%	0.0%	0.0%
Work experience education	41	0	0.0%	0.0%	0.0%
Activities director	30	0	0.0%	0.0%	0.0%
Program/Subject Area Administration Subtotal	4142	330	8.0%	100.0%	38.0%
Total All Administrative Positions	6959	869	12.5%	100.0%	100.0%
CPEC doctorates by assignment/sheet1					

Table D-3

Superintendents with a Doctorate by Gender and Ethnicity, 1998-99

Ethnicity	<u>Female</u>			<u>Male</u>			<u>Total</u>		
	<u>Number of Superintendents</u>	<u>Superintendents with Doctorate</u>		<u>Number of Superintendents</u>	<u>Superintendents with Doctorate</u>		<u>Number of Superintendents</u>	<u>Superintendents with Doctorate</u>	
		<u>Number</u>	<u>Percent</u>		<u>Number</u>	<u>Percent</u>		<u>Number</u>	<u>Percent</u>
White	160	80	50.0	462	219	47.4	622	299	48.1
Hispanic	9	6	66.7	46	18	39.1	55	24	43.6
African American	3	2	66.7	10	6	60.0	13	8	61.5
Asian	6	2	33.3	13	4	30.8	19	6	31.6
American Indian	1	0	0.0	2	1	50.0	3	1	33.3
Filipino	0	0	NA	1	0	0.0	1	0	0.0
Pacific Islander	1	1	100.0	0	0	NA	1	1	100.0
Multiple or No Response	1	1	100.0	1	1	100.0	2	2	100.0
Total	181	92	50.8	535	249	46.5	716	341	47.6

CPEC doctorates by ethnicity and gender/sheet 1

Table D-4

District Administrators with a Doctorate by Gender and Ethnicity, 1998-99

(Excludes superintendents; includes deputy and associate superintendents)

Ethnicity	Female			Male			Total		
	Number of Administrators	Administrators with Doctorate Number Percent		Number of Administrators	Administrators with Doctorate Number Percent		Number of Administrators	Administrators with Doctorate Number Percent	
White	3273	399 12.2%		2145	373 17.4%		5418	772 14.2%	
Hispanic	493	32 6.5%		331	43 13.0%		824	75 9.1%	
African American	482	43 8.9%		150	21 14.0%		632	64 10.1%	
Asian	182	11 6.0%		94	8 8.5%		276	19 6.9%	
American Indian	31	2 6.5%		17	3 17.6%		48	5 10.4%	
Filipino	37	8 21.6%		14	1 7.1%		51	9 17.6%	
Pacific Islander	6	0 0.0%		6	2 33.3%		12	2 16.7%	
Multiple or No Response	23	5 21.7%		15	0 0.0%		38	5 13.2%	
Total	4527	500 11.0%		2772	451 16.3%		7299	951 13.0%	

Table D-5

Administrative Positions in which More than 5% of Male and/or Female Doctorates are Employed

Number and Percentage of Doctorates by Administrative Position and Gender

<u>Administrative Position</u>	<u>Females</u>		<u>Males</u>	
	<u>Number of Female Doctorates</u>	<u>Percentage of All Female Doctorates</u>	<u>Number of Male Doctorates</u>	<u>Percentage of All Male Doctorates</u>
Deputy/associate superintendent	38	7.6%	62	13.7%
Instruction/curriculum	112	22.4%	55	12.2%
Staff personnel	25	5.0%	59	13.1%
Pupil personnel	27	5.4%	44	9.8%
Special education	55	11.0%	41	9.1%
Federal/State programs	36	7.2%	27	6.0%
Other/combinations of general administrative positions	25	5.0%	24	5.3%
Other/combinations of program and subject area positions	26	5.2%	12	2.7%
Total Doctorates High Incidence Positions	344	68.8%	324	71.8%
Total Doctorates All Positions	500		451	

CPEC district admins by gender and ethnicity sheet 1

Table 6-6

Administrative Positions in which More than 5% of Ethnic Group Doctorates are Employed

Number and Percentage of Doctorates by Administrative Position and Ethnicity

<u>Administrative Position</u>	<u>Asian</u>		<u>Hispanic</u>		<u>African-American</u>		<u>White</u>	
	<u>Number of Asian Doctorates</u>	<u>Percentage of All Asian Doctorates</u>	<u>Number of Hispanic Doctorates</u>	<u>Percentage of All Hispanic Doctorates</u>	<u>Number of Afro-Am Doctorates</u>	<u>Percentage of All Afro-Am Doctorates</u>	<u>Number of White Doctorates</u>	<u>Percentage of All White Doctorates</u>
Deputy/associate superintendent	4	21.1%	14	18.7%	4	6.3%	75	9.7%
Instruction/curriculum	6	31.6%	8	10.7%	4	6.3%	144	18.7%
Staff personnel	**	**	11	14.7%	4	6.3%	67	8.7%
Pupil personnel	**	**	**	**	5	7.8%	64	8.3%
Special education	**	**	**	**	**	**	92	11.9%
Federal/State programs	4	21.1%	10	13.3%	5	7.8%	44	5.7%
Other/combinations of general administrative positions	1	5.3%	**	**	**	**	41	5.3%
Other/combinations of program and subject area positions	**	**	**	**	13	20.3%	^^	**
Administrative Assistant	1	5.3%	**	**	**	**	**	**
Bilingual education	2	10.5%	7	9.3%	**	**	**	**
Health	1	5.3%	**	**	**	**	**	**
Total Doctorates High Incidence Positions	19	100.0%	50	66.7%	35	54.7%	527	68.3%
Total Doctorates All Postions	19		75		64		772	

**Positions in which less than 5% of the doctorates in the ethnic group are employed
CPEC district admins by gender and ethnicity sheet 2

Table D-7

	<u>Asian</u>		<u>Hispanic</u>		<u>African-American</u>		<u>White</u>	
	<u>Number</u> <u>of Asian</u> <u>Doctorates</u>	<u>Percent of</u> <u>All Doctorates of Asian</u> <u>of Gender</u>	<u>Number</u> <u>of Hispanic</u> <u>Doctorates</u>	<u>Percent of</u> <u>All Doctorates of Hispanic</u> <u>of Gender</u>	<u>Number</u> <u>of Afro-Am</u> <u>Doctorates</u>	<u>Percent of</u> <u>All Doctorates of Afro-Am</u> <u>of Gender</u>	<u>Number</u> <u>of White</u> <u>Doctorates</u>	<u>Percent of</u> <u>All Doctorates of White</u> <u>of Gender</u>
Administrative Position								
Deputy/associate superintendent	4		14		4		75	
Female	1	9.1%	8	25.0%	3	7.0%	26	6.5%
Male	3	37.5%	6	14.0%	**	**	49	13.1%
Instruction/curriculum	6		8		4		144	
Female	5	45.5%	6	18.8%	3	7.0%	93	23.3%
Male	1	12.5%	**	**	**	**	51	13.7%
Staff personnel	**	**	11		4		67	
Female	**	**	4	12.5%	**	**	20	5.0%
Male	**	**	7	16.3%	3	14.3%	47	12.6%
Pupil personnel	**	**	**	**	5		64	
Female	**	**	**	**	**	**	25	6.3%
Male	**	**	**	**	3	14.3%	39	10.5%
Special education	**	**	**	**	**	**	92	
Female	**	**	**	**	3	7.0%	52	13.0%
Male	**	**	**	**	**	**	40	10.7%

Federal/State programs	4		10		5		44	
Female	**	**	4	12.5%	4	9.3%	28	7.0%
Male	4	50.0%	6	14.0%	**	**	**	**
Other/combinations of general administrative positions	1		**	**	**	**	41	
Female	1	9.1%	**	**	**	**	**	**
Male	**	**	**	**	**	**	22	5.9%
Other/combinations of program and subject area positions	**	**	**	**	13		^^	**
Female	**	**	**	**	11	25.6%	**	**
Male	**	**	**	**	2	9.5%	**	**
Administrative Assistant	1		**	**	**	**	**	**
Female	1	9.1%	**	**	**	**	**	**
Male	**	**	**	**	**	**	**	**
Bilingual education	2		7		**	**	**	**
Female	2	18.2%	5	15.6%	**	**	**	**
Male	**	**	**	**	**	**	**	**
Health	1		**	**	**	**	**	**
Female	1	9.1%	**	**	**	**	**	**
Male	**	**	**	**	**	**	**	**

Welfare and attendance	**	**	**	**	**	**	**	**
Female	**	**	**	**	**	**	**	**
Male	**	**	3	7.0%	**	**	**	**
Region/area administrator	**	**	**	**	**	**	**	**
Female	**	**	**	**	**	**	**	**
Male	**	**	**	**	3	14.3%	**	**
Integration/desegregation	**	**	**	**	**	**	**	**
Female	**	**	**	**	**	**	**	**
Male	**	**	**	**	2	9.5%	**	**
Program evaluation/research	**	**	**	**	**	**	**	**
Female	**	**	**	**	**	**	20	5.0%
Male	**	**	**	**	**	**	**	**
Finance/business	**	**	**	**	**	**	**	**
Female	**	**	**	**	**	**	**	**
Male	**	**	**	**	**	**	20	5.4%
Total Doctorates High Incidence Positions	19		50		35		527	
Female	11	100.0%	27	84.4%	24	55.8%	264	66.2%
Male	8	100.0%	22	51.2%	13	61.9%	268	71.8%
Total Doctorates All Positions	19		75		64		772	

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Female	11	32	43	399
Male	8	43	21	373

**Positions in which less than 5% of the doctorates in the ethnic/gender group are employed

CPEC district adminis. by gender and ethnicity sheet 3

Table D-8

Principals with a Doctorate by Gender and Ethnicity, 1998-99

Ethnicity	Number of Principals	<u>Female</u> Principals with Doctorate		Number of Principals	<u>Male</u> Principals with Doctorate		Number of Principals	<u>Total</u> Principals with Doctorate	
		Number	Percent		Number	Percent		Number	Percent
White	2858	210	7.3%	2447	210	8.6%	5305	420	7.9%
Hispanic	473	30	6.3%	457	22	4.8%	930	52	5.6%
African American	425	36	8.5%	182	17	9.3%	607	53	8.7%
Asian	146	13	8.9%	59	5	8.5%	205	18	8.8%
American Indian	33	5	15.2%	16	4	25.0%	49	9	18.4%
Filipino	23	2	8.7%	23	0	0.0%	46	2	4.3%
Pacific Islander	11	1	9.1%	3	2	66.7%	14	3	21.4%
Multiple or No Response	36	1	2.8%	26	5	19.2%	62	6	9.7%
Total	4005	298	7.4%	3213	265	8.2%	7218	563	7.8%

CPEC doctorates by ethnicity and gender/sheet 1

Table D-9

Superintendents

Percentage of Superintendents with Doctorate by Region and District Size

	<u>Urban South</u>		<u>Urban North</u>		<u>Suburban North</u>		<u>Southeast</u>		<u>Central Coast</u>		<u>Central Valley</u>		<u>Rural North</u>		<u>Rural Mountains</u>		<u>Total</u>	
	<u># of Supts.</u>	<u>% with Doc.</u>	<u># of Supts.</u>	<u>% with Doc.</u>	<u># of Supts.</u>	<u>% with Doc.</u>	<u># of Supts.</u>	<u>% with Doc.</u>	<u># of Supts.</u>	<u>% with Doc.</u>	<u># of Supts.</u>	<u>% with Doc.</u>	<u># of Supts.</u>	<u>% with Doc.</u>	<u># of Supts.</u>	<u>% with Doc.</u>	<u># of Supts.</u>	<u>% with Doc.</u>
Less than 2500	18	50.0	21	42.9	36	41.7	17	29.4	26	50.0	74	27.0	54	22.2	24	37.5	270	34.1
2500 to 4999	16	68.8	22	54.5	14	50.0	10	50.0	13	38.5	30	36.7	10	60.0	3	33.3	118	49.2
5000 to 9999	41	65.9	22	63.6	14	57.1	15	53.3	14	71.4	15	60.0	5	80.0	0	NA	126	63.5
10000 to 19999	28	78.6	14	21.4	3	66.7	12	59.3	10	50.0	7	42.9	1	100.0	1	100.0	76	57.9
20000 to 39999	20	65.0	5	40.0	2	0.0	9	88.9	1	100.0	5	83.3	0	NA	0	NA	43	67.4
40000 or more	5	100.0	5	20.0	0	NA	1	100.0	0	NA	1	0.0	0	NA	0	NA	12	58.3
County Offices	2	100.0	4	100.0	6	50.0	3	66.7	5	60.0	7	42.9	18	44.4	8	40.0	53	54.7
Total	130	68.5	93	48.4	75	50.7	67	53.7	69	53.6	140	36.4	88	35.2	36	41.7	698	48.6

Table D-10

Superintendent-Principals

Percentage of Superintendent-Principals with Doctorate by Region and District Size

	<u>Urban South</u>		<u>Urban North</u>		<u>Suburban North</u>		<u>Southeast</u>		<u>Central Coast</u>		<u>Central Valley</u>		<u>Rural North</u>		<u>Rural Mountains</u>		<u>Total</u>	
	<u># of Supts.</u>	<u>% with Doc.</u>	<u># of Supts.</u>	<u>% with Doc.</u>	<u># of Supts.</u>	<u>% with Doc.</u>	<u># of Supts.</u>	<u>% with Doc.</u>	<u># of Supts.</u>	<u>% with Doc.</u>	<u># of Supts.</u>	<u>% with Doc.</u>	<u># of Supts.</u>	<u>% with Doc.</u>	<u># of Supts.</u>	<u>% with Doc.</u>	<u># of Admin.</u>	<u>% with Doc.</u>
Less than 2500	6	0.0	9	44.4	29	10.3	3	0.0	22	22.7	58	13.8	89	4.5	9	22.2	225	11.6
2500 to 4999	1	0.0	3	33.3	3	66.7	1	100.0	2	0.0	3	0.0	3	66.7	0	NA	16	37.5
5000 to 9999	8	37.5	3	66.7	2	0.0	3	0.0	0	NA	2	0.0	0	NA	0	NA	18	27.8
10000 to 19999	5	0.0	0	NA	0	NA	3	0.0	2	0.0	1	0.0	0	NA	0	NA	11	0.0
20000 to 39999	8	12.5	2	0.0	0	NA	2	0.0	0	NA	2	0.0	0	NA	0	NA	14	7.1
40000 or more	0	NA	1	100.0	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	1	100.0
County Office	1	0.0	3	0.0	0	NA	1	0.0	0	NA	0	NA	1	0.0	0	NA	6	0.0
Total	29	13.8	21	38.1	34	14.7	13	7.7	26	19.2	66	12.1	93	6.5	9	22.2	291	13.4

Table D-11

All District Administrators
(excluding superintendents)

Percentage of Superintendents with Doctorate by Region and District Size

	<u>Urban</u> <u>South</u>		<u>Urban</u> <u>North</u>		<u>Suburban</u> <u>North</u>		<u>Southeast</u>		<u>Central</u> <u>Coast</u>		<u>Central</u> <u>Valley</u>		<u>Rural</u> <u>North</u>		<u>Rural</u> <u>Mountains</u>		<u>Total</u>	
	<u># of</u> <u>Admin</u>	<u>% with</u> <u>Doc.</u>	<u># of</u> <u>Admin</u>	<u>% with</u> <u>Doc.</u>	<u># of</u> <u>Admin</u>	<u>% with</u> <u>Doc.</u>	<u># of</u> <u>Admin</u>	<u>% with</u> <u>Doc.</u>	<u># of</u> <u>Admin</u>	<u>% with</u> <u>Doc.</u>	<u># of</u> <u>Admin</u>	<u>% with</u> <u>Doc.</u>	<u># of</u> <u>Admin</u>	<u>% with</u> <u>Doc.</u>	<u># of</u> <u>Admin</u>	<u>% with</u> <u>Doc.</u>	<u># of</u> <u>Admin</u>	<u>% with</u> <u>Doc.</u>
Less than 2500	22	22.7	60	16.7	36	13.9	12	8.3	41	0.0	90	7.8	61	0.0	17	29.4	339	9.7
2500 to 4999	62	21.0	81	19.8	76	13.2	58	10.3	66	19.7	122	16.4	33	9.1	14	7.1	512	16.0
5000 to 9999	285	26.0	198	16.2	92	12.0	86	8.1	109	19.3	125	7.2	42	9.5	0	NA	937	16.9
10000 to 19999	387	24.0	207	13.0	43	14.0	148	19.6	151	11.3	90	21.1	22	0.0	22	18.2	1070	18.2
20000 to 39999	494	17.0	134	9.7	59	8.5	181	19.3	7	28.6	168	18.5	0	NA	0	NA	1043	16.3
40000 or more	1902	5.2	316	8.2	0	NA	57	14.0	0	NA	54	14.8	0	NA	0	NA	2329	6.1
County Offices	154	29.2	138	23.2	96	15.6	159	11.3	106	17.0	236	13.1	132	4.5	49	16.3	1070	16.2
Total	3306	12.5	1134	13.8	402	12.9	701	14.8	480	14.8	885	14.1	290	4.5	102	17.6	7300	13.0

CPEC doctorates by region and district size/sheet 1

Table D-13

**Principals with A Doctorate
By School Level and Region, 1998-99**

<u>Region</u>	<u>Elementary</u>		<u>Secondary</u>		<u>Total Principals</u>	
	<u>Number of Principals</u>	<u>Percent with Doctorate</u>	<u>Number of Principals</u>	<u>Percent with Doctorate</u>	<u>Number of Principals</u>	<u>Percent with Doctorate</u>
Urban South	2266	8.8	478	13.0	2744	9.5
Southeast	625	6.9	139	16.5	764	8.6
Rural Mountain	76	3.9	30	16.7	106	7.5
Suburban North	358	7.3	98	7.1	456	7.2
Central Coast	392	6.4	86	8.1	478	6.7
Urban North	1167	6.1	241	6.6	1408	6.2
Central Valley	713	5.0	185	9.7	898	6.0
Rural North	256	5.1	110	7.3	366	5.7
	5853	7.1	1367	10.7	7220	7.8

CPEC doctorates by region/sheet 2

Table D-14
Incumbents Possessing a Doctorate
By Position and Selected Years

Position	1984-1985	1990-1991		1995-1996		1998-1999	
	Percent of Position Holders with a Doctorate	Number of Position Holders	Number with a Doctorate	Percent of Position Holders with a Doctorate	Number of Position Holders	Number with a Doctorate	Percent of Position Holders with a Doctorate
Administrators subgroup							
Superintendent	46.0	686	338	49.3	703	347	49.4
Deputy or associate superintendent (general)		223	78	35.0	267	85	31.8
Superintendent-principal		415	50	12.0	338	56	16.6
All other certificated district administrators		5,710	829	14.5	4,915	679	13.8
Non-certificated district administrators		200	41	20.5	85	14	16.5
Principal	10.0	6,561	563	8.6	6,912	574	8.3
School site administrator (excluding principals)	4.0	6,745	223	3.3	7,099	264	3.7
Subtotal	12.7	20,540	2,122	10.3	20,319	2,019	9.9
Direct Services Personnel subgroup							
Full-time teaching principal or superintendent		66	2	3.0	114	-	0.0
Pupil Services Personnel		17,923	688	3.8	17,200	657	3.8
Teacher		220,732	2,043	0.9	232,620	1,986	0.9
Subtotal		238,721	2,733	1.1	249,934	2,643	1.1
Total		259,261	4,855	1.9	270,253	4,662	1.7

Sources: CBEDS 1990, 1995, and 1998. The Doctorate in Education, Issues of Supply and Demand in California, CPEC, March 1987, Report 87-
CPEC comparison of doctorates over time/sheet 1

Appendix E

Employment of Education Doctorates in the Public Schools of California and Selected Comparison States

In this chapter we compare the level of employment of doctorates in the public schools of California with that in five other states that are comparable in size and diversity.

Data were obtained from the state departments of education in Florida, Illinois, New York, Pennsylvania, and Texas. Ideally, we should control for school district size in these comparisons—because larger districts have greater responsibilities (more pupils, larger budgets), offer higher pay, and attract candidates with higher qualifications—but employment by district size was readily available only from Illinois. However, controlling for district size is not necessary when we look at school-level administrators with doctorates.

National data on the educational attainment of school administrators is not available from the National Center for Education Statistics (NCES), except for information on principals in 1993-94. Table E-1 shows that in 1993-94, California had somewhat fewer elementary principals than the nation (71 principals with a doctorate for every 1,000 schools, compared to 86), but was slightly above the national total in terms of high school principals.

Table E-1

Percentage of Principals with Doctorate, 1993-94, California and the Nation by Public School Type

Type of School	Percentage of Principals With Doctorate	
	Nation	California
Elementary	8.6	7.1
Secondary	10.3	10.7

Table E-2 summarizes the information supplied by the five comparison states. There are always issues of comparability in the occupational categories, particularly among central office administrators which include deputy, associate, and assistant superintendents, and directors, coordinators, and supervisors. We think the most meaningful comparison is obtained by combining all these types of central office administrators in one category.

Superintendents. Figure E-1 graphically displays the percentage of superintendents with doctorates in the six states. We have shown California *twice*—first including only persons who are classified as a “superintendent” in the CBEDS data base and, second, including persons called “superintendent/principal.” The second measure is more comparable because the other states’ data include superintendents of small districts which often are led by a superintendent/principal in California.

Figure E-1 shows that the large Northern states have more superintendents with doctorates than California, but the difference between California and New York is not great. Texas and Florida, on the other hand, have substantially fewer chief executive officers with doctorates than California.

Central Office Administrators. In the central office (see Figure E-2), California again leads Florida and Texas in the employment of persons with doctorates, but it also leads New York by a substantial margin. Pennsylvania is significantly higher than California in this category (as with superintendents), and Illinois is also higher.

Principals. Looking at principals at all levels, we find that again Pennsylvania is in the lead, and this time New York exceeds California (see Figure E-3). California and Florida are close, while Texas trails substantially.

In terms of **elementary school principals** (see Figure E-4), New York has 32 more principals with doctorates per 1,000 elementary schools than California, and Pennsylvania has 56 more. California also trails Illinois and Florida by a small amount in this employment category.¹

With respect to **high school principals** (see Figure E-5), California compares a little better, exceeding Florida and trailing Illinois and New York by only small numbers, but Pennsylvania once more greatly exceeds California (146 principals with a doctorate per 1,000 high schools compared to 107 in California).

Site Administrators (excluding principals). With respect to vice-principals and campus deans with doctorates, California trails all the states except Texas (see Figure E-6).

All Administrators. Finally, and as would be expected from the previous findings, the sum of the parts puts Pennsylvania at the top in the incidence of doctorates among school administrators, as illustrated in Figure E-7. The number of doctorates per 1,000 administrators in each state is shown in Table E-3:

Table E-3

Doctorates Per 1,000 Administrators in California and Selected States

<u>State</u>	<u>Doctorates Per 1,000 Administrators</u>
Pennsylvania	173
Illinois	134
New York	99
California	91
Florida	61
Texas	58

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¹ Information was not available from Texas on principals by school level.

Table E-2

Doctorates by Position, California and Selected States

<u>Position</u>	New York (1996-1997)		<u>Position</u>	Illinois (1998-1999)	
	<u>Persons in Position</u>	<u>Percentage with Doctorate</u>		<u>Persons in Position</u>	<u>Percentage with Doctorate</u>
Superintendent (Independent)	408	53.4	Superintendent (Regional)	45	22.2
Superintendent (Dependent)	347	25.9	Superintendent	857	46.7
Total	755	40.8	Total	902	45.2
Deputy/Associate Superintendent	132	22.0	Deputy/Associate Superintendent	52	42.3
(1) Assistant Superintendent	557	28.4	(1) Assistant Superintendent	338	29.3
(2) Business Manager	250	3.6	(2) Business Manager	163	9.2
(3) Director/Coordinator	4186	7.4	(3) Directors/Coordinators	1351	12.5
(4) Supervisor	722	6.0	(4) Supervisors	202	8.9
Total (1-4)	5715	9.1	Total (1-4)	2054	14.7
Total (1-4) Deputy/Assoc. Supts	5847	9.4	Total (1-4) + Deputy/Assoc. Supts	2106	15.4
Elementary Principal	2178	10.3	Elementary Principal	2221	7.4
Middle Principal	543	9.2			
Junior High School Principal	127	6.3	Junior High Principal	543	8.8
K-12 Principal	55	5.5			
Senior High School Principal	612	11.6	High School Principal	710	11.3
Junior/Senior High School Principal	214	5.6			
Special Principal	127	9.4			
Total Principals	3856	9.9	Total Principals	3474	8.4
Other Site Administrators	3280	3.9	Other Site Administrators	1619	4.0

Total All Administrators 13738 9.9

Total All Administrators 8101 13.4

**Florida
(1999-2000)**

**Pennsylvania
(1999-2000)**

<u>Position</u>	Number of Percentage Persons in with		<u>Position</u>	Number of Percentage Persons in with	
	<u>Position</u>	<u>Doctorate</u>		<u>Position</u>	<u>Doctorate</u>
Superintendent	67	17.9	Superintendent	600	63.0
Deputy/Associate Superintendent	71	25.4	Chief Admin Officer/Exec. Dir.	74	47.3
(1) Assistant Superintendent	282	17.4	(1) Assistant Superintendent	301	52.5
(2) Business Manager	39	17.9	(2) Business Manager	456	1.5
(3) Directors/Coordinators	746	7.4	(3) Directors/Coordinators	337	8.3
(4) Supervisors	292	5.1	(4) Supervisors	1191	17.8
Total (1-4)	1359	9.3	Total (1-4)	2285	17.7
Total (1-4) + Deputy/Assoc. Supts	1430	10.1	Total (1-4) + Deputy/Assoc. Supts	2359	18.6
Elementary Principal	1565	7.4	Elementary Principal	1697	12.7
Middle/Junior High Principal	466	7.0			
High School Principal	363	9.4	High School Principal	904	14.6
Other Elementary Secondary Principal	98	1.0	Principal	341	13.8
Exceptional Student School Principal	51	13.7			
Voc. Tech. Center Director	36	11.1	Voc. Tech. Center Director	77	23.4
Total Principals	2579	7.6	Total Principals	3019	13.6
Other Site Administrators	3913	3.5	Other Site Administrators	1245	5.6
Total All Administrators	7989	6.1	Total All Administrators	7123	17.3

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Table E-2 (continued)

Doctorates by Position, California and Selected States

<u>Position</u>	Texas (1999-2000)		<u>Position</u>	California (1998-1999)	
	<u>Persons in Position</u>	<u>Percentage with Doctorate</u>		<u>Persons in Position</u>	<u>Percentage with Doctorate</u>
Superintendent	1117	24.4	Superintendent	714	48.0
			Superintendent-Principal	306	12.7
			Total Superintendents	1020	37.4
(1) Deputy/Assoc./Assist. Superintendent	843	18.4	Deputy/Associate Superintendent	341	29.3
(2) Director, Human Resources	216	11.6			
(3) Business Manager	521	1.0	(1) Business Manager	116	19.8
(4) Instructional Officer	2259	9.8			
(5) Teacher Supervisor	1270	3.9			
			(2) All Other Certificated Administrators	6843	12.4
			Total (1-2)	6959	12.5
Total (1-5)	5109	8.9	Total (1-2) + Deputy/Assoc. Supts	7300	13.3
Elementary Principal			Elementary Principal	5853	7.1
Middle/Junior High Principal					
High School Principal			High School Principal	1367	10.7
Other Elementary Secondary Principal					
Exceptional Student School Principal					12.7
Principal	6694	4.9	Full-time Teaching Principal/Supt.	88	1.1
Total Principals	6694	4.9	Total Principals	7308	7.9
Other Site Administrators	8179	2.1	Other Site Administrators	8387	3.0
Total All Administrators	21099	5.8	Total All Administrators	24015	9.1

Sources: State Departments of Education
CPEC New York and other states/sheet1

Figure E-1

Percentage of Superintendents with Doctorate in Selected States

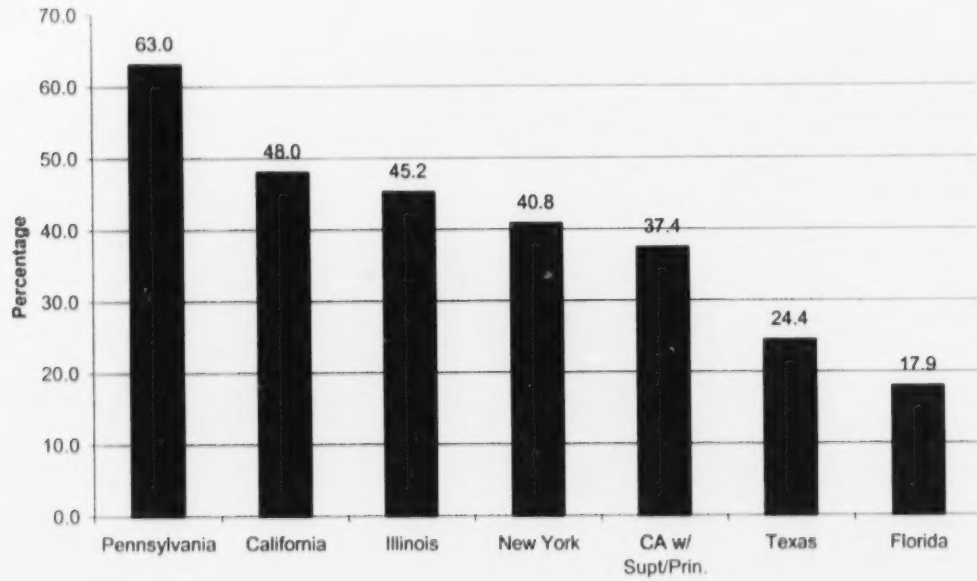


Figure E-2

Percentage of Central Office Administrators With Doctorate In Selected States

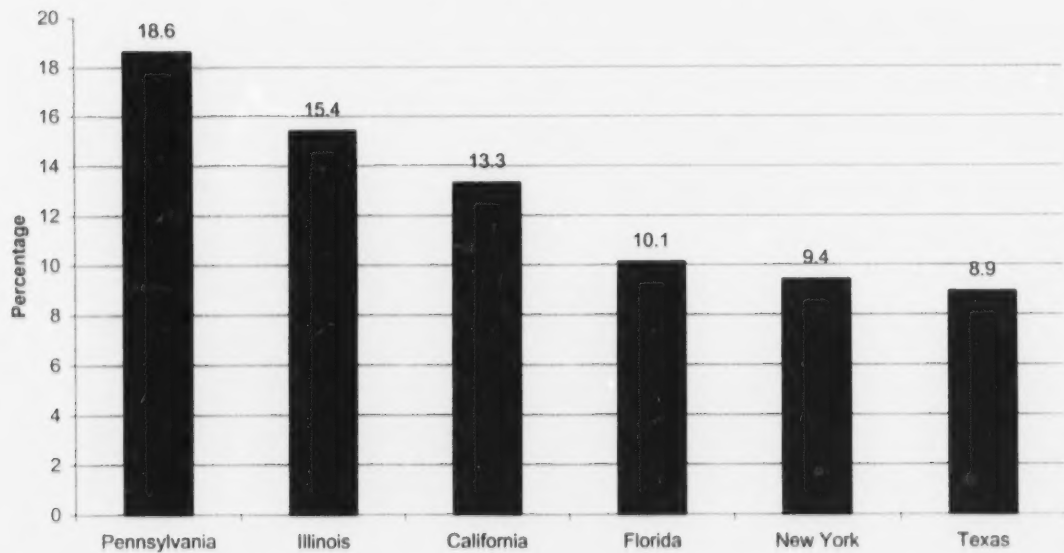


Figure E-3

Percentage of Principals (Elementary and Secondary) with Doctorate in Selected States

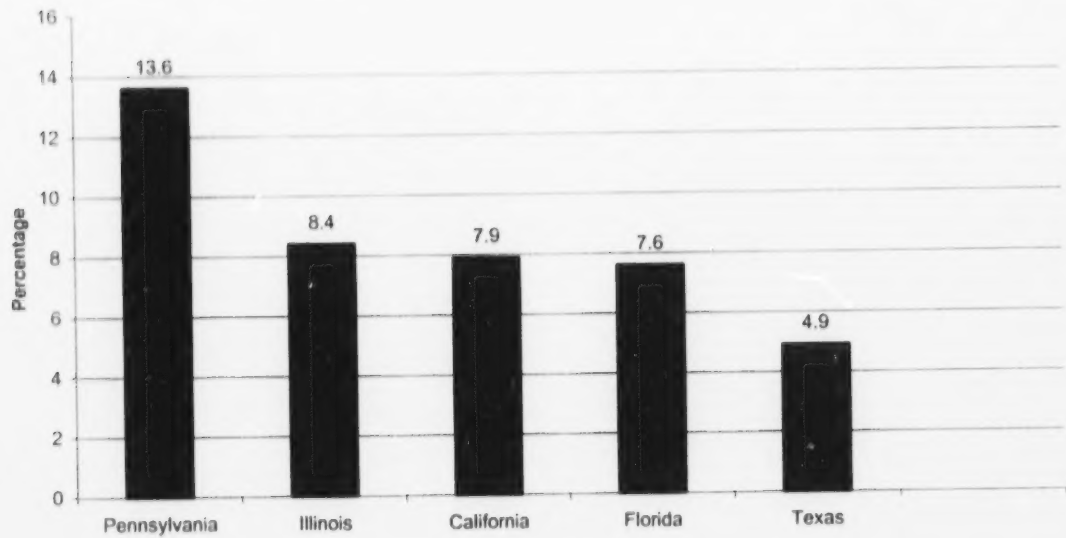


Figure E-4

Percentage of Elementary School Principals with Doctorate in Selected States

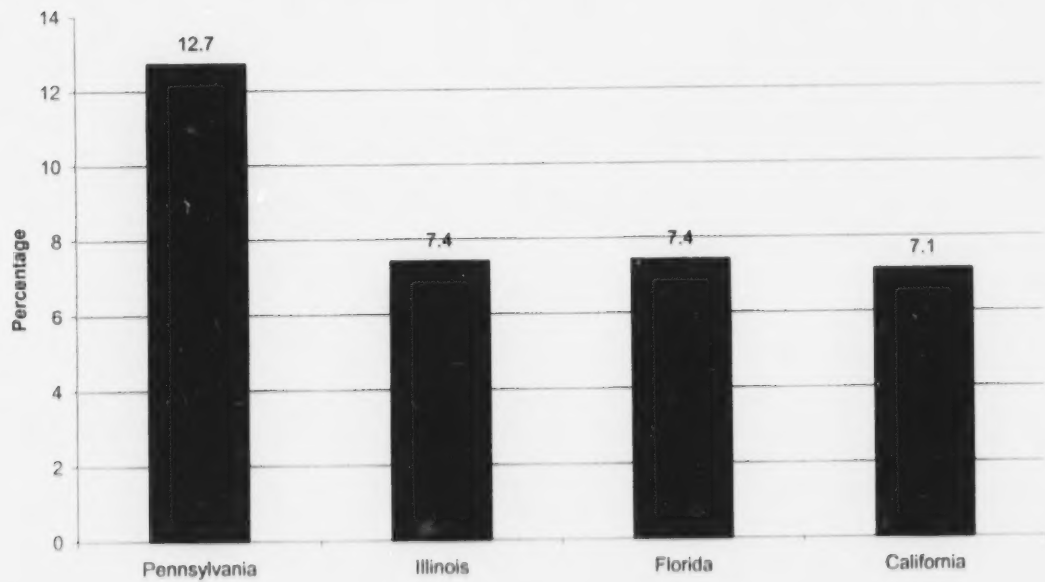


Figure E-5

Percentage of High School Principals with Doctorate in Selected States

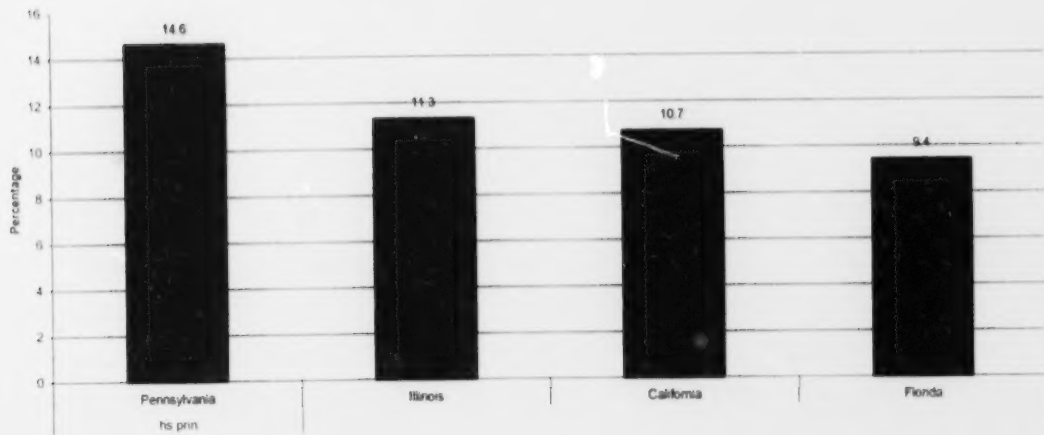


Figure E-6

Percentage of Site Administrators (Excluding Principals) with Doctorate in Selected States

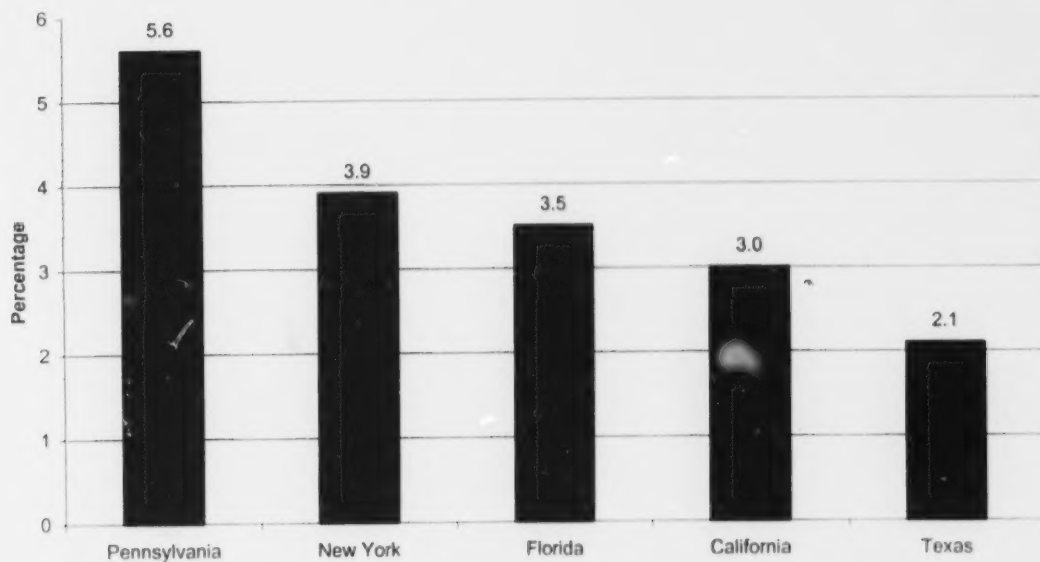
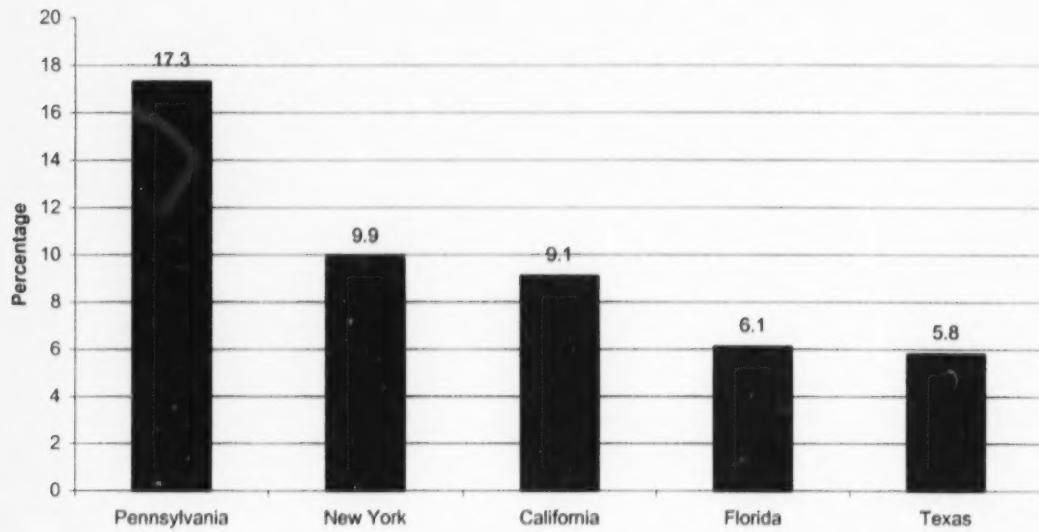


Figure E-7

Percentage of All Administrators (School Site and Central Office) with Doctorate in Selected States



Appendix F

Indicators of School District Demand for Education Doctorates

In this chapter we look at several indicators of school district demand for persons with a doctorate: salary increments for the doctoral degree, district programs to encourage staff to attain the doctorate, educational requirements for administrative positions, and the trend in applications to doctoral programs.

Salary Increments for Doctoral degrees

A salary "bonus" for possession of a doctorate could be a useful tool for school district governing boards in attracting new leadership personnel with doctorates and in encouraging existing employees to attain the doctorate.

Teacher Salary Schedules—1998-99. One source of information on doctoral bonuses is the teacher salary information reported by school districts to the California Department of Education annually on the Form J-90.¹ While this information concerns teacher salaries only, it is our understanding that in most districts administrators receive the same bonus for the doctorate as teachers.² In a later subsection we will compare the teacher data with the results of our survey of superintendents

Figure F-1 displays the amount of doctoral salary increments by number of districts. Of the 900 districts in the data base, only 313 (34.8%) provided a doctorate bonus for teachers in 1998-99.

Figure F-2 gives a better picture of the distribution of bonus amounts among school districts that offered a bonus. For these 313 districts, the mean amount was \$1,002, the median was \$990, and the mode was \$1,000. The highest amount was \$3,760 and the lowest amount was \$152. Ten school districts gave bonuses as a percentage of salary—these ranged from 2% to 5%. The following table shows the most frequent doctoral bonus amounts in 1998-99.

¹ The sources of data in this subsection are the 1994-95 and 1998-99 J-90. The information was supplied by School Services of California, Inc.

² In a small survey of Human Resource Directors who are broadly representative of districts across the state, ten responded that all administrators (superintendent, district administrators, and principals) received the same doctoral salary increment as teachers, 4 indicated that some or all administrators receive a smaller doctoral bonus, and one reported that the administrators received \$1,000 per year while teachers received \$825.

Table F-1

Most Frequent Doctoral Bonus Amounts

<u>Bonus Amount</u>	<u>Number of Districts</u>
\$500	37
600	13
700	9
750	14
800	9
1000	55
1200	6
1500	12
2000	5

We examined the relationship between salary increments for doctorates and district size and district type (elementary, high school, and unified). Table F-2 shows that, generally, larger districts are more likely to give a doctorate bonus than smaller districts. Only 19.6% of the very small districts (less than 2,500 pupils) gave a bonus, while 70.4% of districts having 10,000 to 20,000 students and 67.4% of districts with from 20,000 to 40,000 pupils gave bonuses. However, 61.5% of the 13 districts with more than 40,000 students did not offer a doctorate salary increment.

Additional analyses (not shown in tables) were conducted which indicated the following:

- The amount of the bonus does not correlate closely with district size.
- Within size categories, high school districts were more likely to give a doctorate bonus than elementary and unified districts.

Change in Teacher Salary Schedules 1994-95 to 1998-99. We wanted to know whether there has been any movement to increase the doctoral supplement in recent years, perhaps reflecting an increased interest in attracting, or fostering internally, administrative personnel with doctorates.

Table F-2 summarizes the changes in doctoral increments from 1994-95 to 1998-99. The data is somewhat difficult to work with because it is not known whether districts that reported a doctoral supplement in 1998-99, but not one in 1994-95, actually had no supplement in the earlier year; or whether they had a supplement in 1994-95 but did not report it because there were no persons in the district who received it. We are inclined to believe that many of the 84 districts that reported a doctoral supplement in 1998-99, but none in 1994-95, actually had supplements in the earlier year, but no employees were receiving it at that time (in 1998-99, 25 of these districts had zero FTE receiving the bonus.) Similarly, it is likely that the 30 districts that had bonuses in 1994-95 still had them in 1998-99, but did not report them because there were no recipients (we reach this conclusion because it is very difficult to eliminate a contract salary item in a public school district).

The key findings illustrated in Table F-2 are:

- The majority of districts (192 districts, or 61.3%) either (1) had doctoral supplements in 1998-99 at the same level as in 1994-95, (2) increased them only by an amount roughly equal to the cost-of-living adjustments received by school districts in those years, or (3) reduced them.
- Only 32 districts (amounting to about 3% of all school districts in the State) had increases substantially exceeding the COLA amount.

Doctoral Bonuses for Superintendents. In the survey of school district superintendents we asked whether the district provided the superintendent a salary bonus if that person held a doctorate. A preliminary analysis shown in Table F-3 reveals that of the 114 superintendents who answered this question (3 did not answer), 35.1% indicated the district offered the bonus. This percentage, which is for 1999-2000, is almost identical to that found in the analysis of 900 J-90 forms for teachers, which showed that 34.8% of the districts offered a doctoral bonus to teachers in 1998-99. This finding is consistent with our belief that teacher, administrator, and superintendent bonuses move in lockstep, and supports the view that the changes over the last five years in teacher bonuses discussed above probably gives a reliable picture of what has happened with administrator bonuses during the same period.

Table F-4 displays the amounts of doctoral salary increments given to the sample superintendents in 1999-2000. As with teachers, \$1,000 per year is the modal amount; the range is \$300 to \$3,600 (\$152 to \$3,760 in the teacher data), and the mean in the sample of superintendents is \$1,385 compared to \$1,002 in the teacher data.

Conclusions. We have devoted considerable space to the examination of the available data on doctoral bonuses because the bonus is a potentially powerful tool in attracting (or internally fostering) doctorates in a district's administrative ranks. Our findings suggest the following:

- In nearly two-thirds of the school districts in the State, there are no financial incentives to attract new employees with doctorates or to encourage existing employees to attain a doctorate.
- The amount of doctoral bonuses is so low (even in the large districts which are more likely to have them) as to be almost trivial in comparison to the costs of tuition and books, time, energy, and separation from family that attaining a doctorate entails. Also, the bonus amount in nearly all cases is miniscule compared to the position salary which the incumbent receives whether he or she has a doctorate or not. Clearly, there is little financial incentive in the public schools for a person to acquire a doctorate in education.
- There is no discernable trend in the recent past to increase doctoral bonuses. This suggests there is little competition for persons with doctorates because one of the first things a district would do if there were such competition is to increase the compensation for doctorates.

The lack of special compensation for a doctorate in the great majority of districts, the low levels of such compensation where they exist, and the stagnation of the amount of such bonuses over the last five years (and probably for much longer), provide an indication of a profound lack of interest in and lack of demand for the doctoral degree. While doctoral bonuses are no doubt caught up in collective bargaining and school district politics, which may work to hold

them down, school boards if they wanted could use them as a tool to attract doctorates because the total dollar amount of high bonuses for administrators with doctorates would be very small compared to total district budgets and, in particular, would be small compared to total district outlays for teachers. According to some observers, the price of superintendents is going up; this section, however, has made clear that the price of doctorates is not.

Educational Requirements for Administrative Positions—Discussions with Executive Search Firms³

A clear indicator of a shortage of public school administrators with a doctorate would be an unmet demand for administrators who possess the degree. Therefore, interviews were undertaken with the principals of executive search firms to ascertain the extent to which school districts sought to employ educational leaders with the doctorate, and the extent to which they failed to achieve this goal because of lack of candidates with a doctorate.

In California, two firms account for the vast majority of searches for school district executive personnel. Principals in each of these firms were interviewed about their recruitment activity over the last four years (1996-1997 through 1999-2000). The key findings are:

- In over 160 searches for superintendent in California over the last four years, there were no cases in which the school district employer required that the new superintendent possess a doctorate.
- In the handful of searches for other executives (Associate Superintendent for Curriculum & Instruction, etc.), there were no cases in which the school district employer required that the new administrator possess a doctorate.
- Typical practice in specifying the educational requirements for a school district executive position is to state: "Masters required, doctorate desirable (or preferred)."

Further discussions with the principals of the search firms, with several retired superintendents, and with a past president of the California School Boards Association, revealed that twenty to thirty years ago, on occasion but rarely, school districts would require a doctorate of the superintendent. Thus, it appears that the recent practice of not requiring the doctorate is nothing new, and is substantially a continuation of practice for the past quarter century and more.

The primary reason the doctorate is not made a requirement is that doing so would reduce the size of the pool of applicants. School boards do not want to eliminate applicants who would be otherwise well qualified. This is particularly important to school boards today because the desirability of school district administrative positions has declined appreciably in recent years. Where they used to get fifty to a hundred applicants for an executive position, now twenty to

³ This section is based on information obtained in a broadly representative discussion group of school district Directors of Human Resources, information obtained in a broadly representative discussion group of school superintendents, interviews with key personnel in the recruitment activity at the California School Boards Association and Leadership Associates (the two key executive recruitment organizations for public schools in California), and interviews with a former president of the California School Boards Association, a former County Office of Education superintendent, a leading education lobbyist with thirty-five years experience, a superintendent with experience as superintendent in several districts, with a member of the California State Board of Education, and less formal discussions with others.

thirty is considered a good response. It was beyond the scope of this study to delve deeply into this issue, but all reports indicate there is a serious problem in California in attracting top-notch people into school administration. It's a very difficult job, with long hours, a new emphasis on accountability for student performance, and few rewards.

Interviewees were asked how often they come across a school board member who insists that the formal educational requirement for a superintendency include a doctorate. Extremely rarely was the consistent response. When it occurs, the main arguments for the doctorate are the need for the superintendent to have doctoral status in the community (often a phenomenon of college towns) and the need to have a doctorate for credibility in supervising subordinates who have a doctorate. But the interviewees indicated that the doctorate is rarely mentioned by school board members. And when it is, it's often a negative remark such as not wanting a superintendent who received a doctorate from a "diploma mill." The distinction between Ph.D.s and Ed.D.s simply does not emerge as an issue.

While the doctorate is not required, it remains an attribute of some value. It appears, however, that the value of the doctorate has declined over the years relative to other qualities. A complex set of factors explains this decline. These are outlined briefly in the following paragraphs.

Change in the type of person who serves on school boards has contributed to the devaluation of the doctorate. Years ago, school boards often consisted of members of the community establishment—the banker, the doctor, the lawyer. These conservative boards placed high value on the doctorate. However, financial disclosure laws, the shift of control over school district revenue from the local community to the State with the attendant loss of power, and other forces have tended to reduce the role of the community establishment in the governance of school districts. New board members, according to some interviewees, are less established, less traditional, and less likely to automatically give high value to the doctorate.

Also operating to devalue the doctorate has been the emergence of institutions that seemingly enable just about anyone to receive a doctorate merely by paying the price of admission. As indicated above, the "diploma mill" is one aspect of the doctorate in education that is on the minds of some school board members.

The diploma mill is the extreme example of lack of rigor in programs leading to the education doctorate. But in the course of our interviews, we have heard numerous comments about the lack of "rigor" in the training of education doctorates even at prestigious universities. One interviewee commented that she "waived out" of certain courses she was required to take in the school of education of a prestigious university so that she could take the same courses in an academic department which would be much more difficult and therefore much more rewarding.

While these forces have been working to reduce the value attributed to the doctorate, other forces have worked to increase the relative value of other qualities in a superintendent. The shift of power over education finance from the locality to Sacramento, and the concomitant endless stream of state categorical programs and state mandates, has resulted in the need for a superintendent who can operate politically at the State level, not necessarily an attribute engendered by producing a high-quality doctoral dissertation.

The standards movement has increased the importance of student achievement in evaluating candidates for superintendent. School boards want proof that the individual has a plan, and the

ability to carry it out, that will produce improved student learning. Increasingly, school board members are going to the Internet to check student performance in a candidate's prior district. High stakes testing for graduation is going to add to the importance in the hiring decision of the perception of a candidate's ability to improve student learning.

According to the interviewees, the most important qualities that a school board looks for in a prospective superintendent depend, in the first place, on the needs of the district. For example, a rapidly growing district is going to want a superintendent who can manage a major, long-term construction program, dealing effectively with architects, construction companies, and state regulations and regulators. A district with a diverse population, ethnically and linguistically, is going to look for a superintendent who can lead effectively in such a complex environment. A doctorate in education may or may not add to a person's ability to perform well in these and other difficult situations. Usually, school boards look to demonstrated experience to evaluate a candidate's potential in their district.

Generally, the most important qualities that school boards want are:

- People skills; the ability to get along with board members and subordinates.
- A vision with leadership skills to accomplish it.
- Demonstrated successful experience.
- Broad experience.

In sum, while the value of the doctorate has eroded, the saliency of other skills and abilities has risen. As one interviewee said, if a school board had to choose between two candidates for superintendent who were essentially equal, except that one had an education doctorate from a prestigious university and the other had four-years successful experience as a high school principal, the board would take the principal.

District Programs to Encourage Staff to Attain the Doctorate

A school district that wanted to increase the presence of "doctoral skills" in its administrative staff might establish a program to encourage employees to pursue the doctorate. A few districts around the state have well-established programs for this purpose (see the description of the Clovis USD program in the textbox).

Clovis Unified School District in Fresno County has a well-established program to encourage and support teachers and administrators in acquiring a doctorate. Participants receive a \$4,000 stipend for each of 3 years and are required to work for the district for at least two years after receiving the degree, or they must pay back the stipend. Other support includes a limited number of days off to participate in campus-based courses, flexible work schedule to complete the dissertation, secretarial support, access to district computers, and access to equipment such as scanners to process questionnaires. XX employees are currently participating in the program.

In the random sample Survey of School District Superintendents (the subject of Chapter 9), we asked the following question:

"Does your school district have any programs to encourage or support an employee of the district in attaining a doctorate? If yes, please describe such programs."

Of 111 superintendents who responded to this question, 85% said their district did not have a program to encourage employees to attain the doctorate.

Of the 17 who answered "yes," eleven indicated that the program consisted of a "stipend" or "salary bonus." Several of the respondents clearly indicated that the stipend was not received until after completion of the degree. In the other cases, it is not clear whether the stipend was given while a person was enrolled in the doctoral program, or only after completion.

Six superintendents provided the following brief descriptions of their programs:

- Time-release to take classes.
- We help support their costs such as books or travel. Doctorate is considered part of their staff development.
- A stipend is provided when an employee is enrolled in a program.
- District pays an amount equal to the doctoral stipend towards tuition. This is part of the professional development plan for administrators.
- I provide on-campus time to doctoral candidates. I also have and continue to provide support for organizing, planning, and writing the dissertation.
- Time (flexibility) to go to school.

In sum, it appears that few districts in the state have established a program to encourage administrative employees to acquire the doctorate. Where the stipend is described as the program, the amount is minimal--\$1,000 or less.

To the extent that the existence of programs to encourage employees to acquire a doctorate is an indicator of demand, it seems reasonable to conclude that demand for administrators who hold doctorate is not at a high level.

The Trend in Applications to Doctoral Programs

If the demand in the public schools for administrative personnel who hold a doctorate were rising, one would expect to see an increase in demand for doctoral training. Conversely, if it were falling, one would expect that demand for admission to doctoral programs would be falling.

The deans of schools of education that award doctorates in education administration/leadership were asked to provide the number of applications they received for that program in 1990-91 and in 1995-96 through 1999-2000. Information was provided by eight of the largest programs in education administration/leadership (all accredited institutions), but only five provided the information for the earliest year (1990-91). Table F-2 displays the totals:

Table F-2

Number of Applications to Doctoral Programs in Education Administration/Leadership for
Selected Years

<u>Number of Programs</u>	<u>1990-91</u>	<u>1995-96</u>	<u>1996-97</u>	<u>1997-98</u>	<u>1998-99</u>	<u>1999-00</u>
5	165	179	162	165	210	246
8	----	344	400	324	388	443

While applications appear essentially flat from 1990-91 through 1997-98, there has been a definite upsurge in the last two years. Whether this is a trend that will continue (that is, continued growth in future years), or whether applications will flatten out at a new higher level or decline is unknown. Since 1997-98, two of the largest programs experienced major increases in applications (140% and 43%). One small school reported a 36% increase. Three medium-sized programs indicated that applications had increased from 7.5% to 15%. And two small programs reported declines in applications of 19% and 17%.

In sum, it appears that there has been substantial growth during the last two years in interest in attaining the doctorate in education administration/leadership. Growth has occurred in most of the programs, suggesting that it is probably not entirely due to increased marketing efforts by the large programs.

Table F-3. District Size by Bonus Amount

		Bonus Amount								Total
District size		No bonus	1% to 5% bonus	Bonus less than \$500	\$500 to \$722	\$723 to \$990	\$991 to \$1001	\$1002 to \$1399	\$1400 and more	
Less than	Count	415	3	4	27	17	25	11	14	516
2500 ADA	% within District size	80.42636	0.581395349	0.775193798	5.23255814	3.294573643	4.84496124	2.131782946	2.713178295	100
	% within Bonus Amount	70.69847	30	21.05263158	32.92682927	33.33333333	45.45454545	23.91304348	28	57.33333
	% of Total	46.11111	0.333333333	0.444444444	3	1.888888889	2.777777778	1.222222222	1.555555556	57.33333
2500 to	Count	72	1	3	13	9	6	5	9	118
4999 ADA	% within District size	61.01695	0.847457627	2.542372881	11.01694915	7.627118644	5.084745763	4.237288136	7.627118644	100
	% within Bonus Amount	12.26576	10	15.78947368	15.85365854	17.64705882	10.90909091	10.86956522	18	13.11111
	% of Total	8	0.111111111	0.333333333	1.444444444	1	0.666666667	0.555555556	1	13.11111
5000 to	Count	54	1	4	21	8	14	15	12	129
9999 ADA	% within District size	41.86047	0.775193798	3.100775194	16.27906977	6.201550388	10.85271318	11.62790698	9.302325581	100
	% within Bonus Amount	9.199319	10	21.05263158	25.6097561	15.68627451	25.45454545	32.60869565	24	14.33333
	% of Total	6	0.111111111	0.444444444	2.333333333	0.888888889	1.555555556	1.666666667	1.333333333	14.33333
10000 to	Count	24	1	5	17	13	8	7	8	81
19999 ADA	% within District size	29.62963	1.234567901	6.172839506	20.98765432	16.04938272	7.407407407	8.641975309	9.87654321	100
	% within Bonus Amount	4.088586	10	26.31578947	20.73170732	25.49019608	10.90909091	15.2173913	16	9
	% of Total	2.66667	0.111111111	0.555555556	1.888888889	1.444444444	0.666666667	0.777777778	0.888888889	9
20000	Count	14	4	1	3	3	4	7	7	43
to 39999	% within District size	32.55814	9.302325581	2.325581395	6.976744186	6.976744186	9.302325581	16.27906977	16.27906977	100
	% within Bonus Amount	2.385009	40	5.263157895	3.658536585	5.882352941	7.272727273	15.2173913	14	4.777778
	% of Total	1.55556	0.444444444	0.111111111	0.333333333	0.333333333	0.444444444	0.777777778	0.777777778	4.777778
40000 and	Count	8		2	1	1		1		13
more ADA	% within District size	61.53846		15.38461538	7.692307692	7.692307692		7.692307692		100
	% within Bonus Amount	1.362862		10.52631579	1.219512195	1.960784314		2.173913043		1.444444
	% of Total	0.88889		0.222222222	0.111111111	0.111111111		0.111111111		1.444444

Total	Count	587	10	19	82	51	55	46	50	900
	% within District size	65.22222	1.111111111	2.111111111	9.111111111	5.666666667	6.111111111	5.111111111	5.555555556	100
	% within Bonus Amount	100	100	100	100	100	100	100	100	100
	% of Total	65.22222	1.111111111	2.111111111	9.111111111	5.666666667	6.111111111	5.111111111	5.555555556	100

CPEC bonus amount by district
size/sheet1

Table F-4

Doctoral Salary Increments for Teachers, 1994-95 and 1998-99

	<u>1994-1995</u>	<u>1998-1999</u>
# of districts shown as having a bonus	267	313
# of districts having a bonus, but 0 FTE receive the bonus	62	77
# of districts having a bonus with greater than 0 FTE receiving the bonus	205	236
# of districts with the same bonus amount in 1998-99 as in 1994-95		104
# of districts whose bonus amount increased by roughly 4 years of COLAS from 1994-95 to 1998-1999		80
# of districts whose bonus decreased from 1994-95 to 1998-99		8
Subtotal		192
# of districts with a substantial increase (greater than a COLA) from 1998-99 to 1994-95		32
Number of districts having a bonus in 1998-99 not shown as having one in 1994-95		84
Number of districts changing from a dollar bonus		

to a percentage bonus	5
Subtotal	121
Total	313

		Bonus amount in 1998-99 (percentage of salary)				
Number of districts shown as giving a bonus as a percentage of salary in 1998-99		2.0	2.2	3.0	3.5	5.0
# of these districts that showed no bonus in 1994-95	4	1	0	1		2
# of districts showing same bonus in 1998-99 as in 1994-95	1	0	0	1	0	0
# of disstricts changing from a dollar amount to a percentage amount	5	0	1	0	2	2
Total	10	1	1	2	2	4

# of districts having a bonus in 1994-95 not shown as having one in 1998-99	30
---# of these districts with 0 FTE receiving a bonus in 1994-95	16
# of districts having a bonus in 1998-99 not shown as having one in 1994-95	84
---# of these districts with 0 FTE receiving a bonus in 1998-99	25

Source: CDE Form J-90 1994-95 and 1998-99 furnished by School Services of California, Inc. (CPEC dr bonus summary stats/sheet1)

100

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Table F-5

Does district provide the superintendent a salary bonus for doctorate?

		Number of Districts	Percent	Valid Percent	Cumulative Percent
Valid	YES	40	34.18803	35.08772	35.08772
	NO	74	63.24786	64.91228	100
	Total	114	97.4359	100	
Missing	Missing	3	2.564103		
Total		117	100		

Table F-6

Number of Districts by Amount of Salary Bonus

	Number of Districts	Percent	Valid Percent	Cumulative Percent
Valid	0	7463.24786	65.48673	65.48673
	300	10.854701	0.884956	66.37168
	500	10.854701	0.884956	67.25664
	600	21.709402	1.769912	69.02655
	748	10.854701	0.884956	69.9115
	750	10.854701	0.884956	70.79646
	800	10.854701	0.884956	71.68142
	1000	119.401709	9.734513	81.41593
	1018	10.854701	0.884956	82.30088
	1200	21.709402	1.769912	84.0708
	1250	10.854701	0.884956	84.95575
	1259	10.854701	0.884956	85.84071
	1500	65.128205	5.309735	91.15044
	1700	10.854701	0.884956	92.0354
	1716	10.854701	0.884956	92.92035
	1900	10.854701	0.884956	93.80531
	2000	10.854701	0.884956	94.69027
	2500	10.854701	0.884956	95.57522
	3000	32.564103	2.654867	98.23009
	3600	10.854701	0.884956	99.11504
5%		10.854701	0.884956	100
Total		113	96.5812	100
Missing--answered that district gives doctoral bonus, but gave no				
Missing amount		43.418803		
Total		117	100	

CPEC bonus amount by district size/sheet 2

Figure F-1

Doctoral Bonus Amount for Teachers, 1998-99

(Including Districts with Zero Bonus)

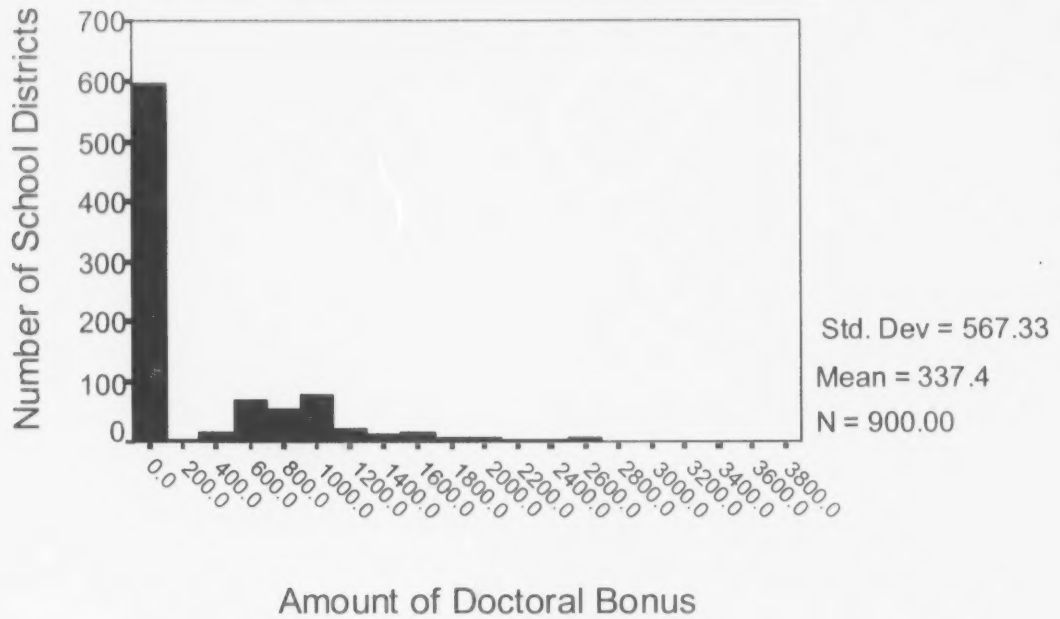
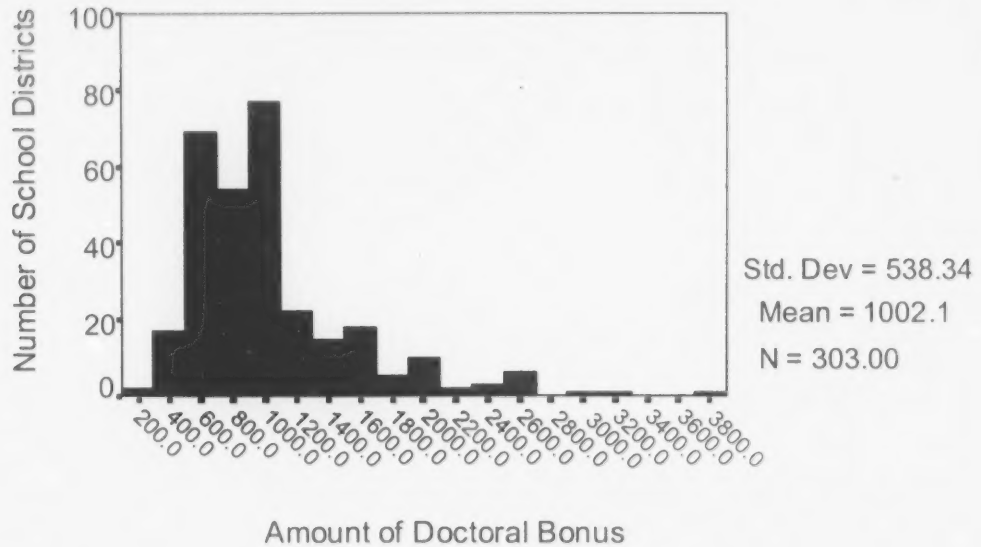


Figure F-2

Doctoral Bonus Amount for Teachers, 1998-99

(Excluding Districts with Zero Bonus)



Appendix G

Views of Public School Superintendents of the Education Doctorate

In this chapter the views of the education doctorate of a stratified random sample of school district superintendents are presented. Why they sought (or have not sought) a doctorate, its importance for doing a good job as a principal or superintendent, desired features of a doctoral program, symbolic value versus training value, accreditation issues, the availability of alternatives to doctoral training, and other topics are explored here.

The Sample of Superintendents

The sample of superintendents was selected as follows: Two samples were selected—one for districts having 2,500 or more pupils in enrollment and one for small districts. The State was divided into thirds (North, Central, and South to ensure regional representation) and each of the two samples was divided among the regions in proportion to the number of districts in the region. Within regions, districts were stratified by type (elementary, high school, and unified) and for the larger district sample they were stratified by size (2,500-7,499, 7,500-14,999, and 15,000 or more). The total sample size was set as the largest size that could be handled within the project's resources and time frame: 123 larger districts and 50 small districts. Within each stratum, the number of districts selected was in the same proportion as the number of districts in the stratum is to the total number of districts. Districts were selected using a random selection procedure contained in the SPSS statistical analysis program.

The response rate to the survey was generally excellent (see Table G-1). Overall, 73% of the superintendents completed the survey, 80% in the larger districts, and 56% in the small districts. The lower response rate (18 of 37) of superintendents in small elementary districts reduced the overall rate.

Characteristics of the sample are shown in Table G-2. The larger-district sample appears to be slightly different from the population (as measured by CBEDS data) in two respects. First, the sample contains either an over-representation of superintendents with doctorates or, if not, superintendents with doctorates returned the survey at a higher rate than those without the degree. And second, the sample contains either an over-representation of female superintendents or, if not, female superintendents returned the survey at a higher rate than male superintendents. (The percentage of males and females in the larger-district sample who hold a doctorate is about the same--67.0% versus 68.5%--which is consistent with the CBEDS data which shows male and female doctorates among superintendents at almost the same percentages.)

In most of the comparisons that follow, the responses of the ethnic minority superintendents are combined in one minority group because of the small number of respondents in the individual ethnic groups.

Characteristics of Superintendents Who Hold a Doctorate

Tables G-2 and G-3 display the following about superintendents in California who hold a doctorate:

- In larger districts, about three out of four possess an Ed.D. (74.7%--95% confidence interval 69%--81%). About a fifth has a Ph.D., and 80% of the Ph.D.s are in education, with only 4.7% in another discipline. Males, females, whites, and minorities have similar percentages who hold an Ed.D. rather than another type of doctorate.
- In small districts, of those with a doctorate, 85.2% hold the Ed.D. Women appear to have more Ph.D.s in education than the men.
- Table 9-3 shows that California's superintendents, on average, earned the doctorate 12.5 years ago and typically did not obtain their doctorate until about 18 to 20 years after receiving their undergraduate degree.
- While earning the doctorate the average respondent spent about 90% of the period working as a school administrator.
- Females took a slightly longer time from baccalaureate to doctorate than males, (20.0 versus 17.1 years), superintendents in small districts received their doctorates more recently than those in larger districts (9.9 versus 13.3 years), and superintendents in small districts and those seeking the Ph.D. appear to have spent more time (roughly one year more) as a full-time student while earning the doctorate than their counterparts.

Reasons for Seeking (and Not Seeking) A Doctorate

Doctorate Holders. Superintendents who hold a doctorate were asked to rank on a scale of from 1 to 5 a set of possible reasons why they sought the doctorate. With "5" being "very important" and "1" being "not important at all," the results are as follows:

Table G-4

Reasons for Obtaining a Doctorate
(All superintendents who hold a doctorate)

<u>Reason</u>	<u>Mean Score*</u>
Intellectual Growth	4.65
Satisfaction of having a doctorate	4.63
Job advancement and promotion	4.24
Acquire organizational and leadership skills	3.93
Salary increase	2.93
Societal or community expectations	2.93
Career field change	2.21

*All paired differences are significant at the $p = < .0005$ level, except intellectual growth and personal satisfaction.

The three highest rated reasons concern personal self-fulfillment while the lesser reasons are more instrumental in nature.

Subgroups were analyzed in terms of their reasons for obtaining a doctorate and the following statistically significant ($p = < .0005$) differences were found.

- None between males and females
- Minorities rated the acquisition of organizational and leadership skills higher than whites (4.64 versus 3.68).
- Bigger-district superintendents rated organizational/leadership skills and career field change higher than small district superintendents (4.21 versus 3.15 and 2.44 versus 1.61, respectively), while small district leaders rated personal satisfaction slightly higher than the superintendents of larger districts (5.0 versus 4.5).
- Ed.D.s rated job advancement and salary increase higher than Ph.D.s (4.36 versus 3.68 and 3.14 versus 2.01, respectively).

Pursuers of a Doctorate. Ten of the superintendents who do not hold a doctorate said they planned to enroll (9 persons) or were enrolled (1) in a doctoral program.

Table G-5

Reasons for Seeking a Doctorate
(Superintendents who are enrolled or plan to enroll in a doctoral program)

<u>Reason</u>	<u>Mean Score*</u>
Intellectual Growth	4.60
Satisfaction of having a doctorate	4.42
Acquire organizational and leadership skills	3.94
Salary increase	3.59
Job advancement and promotion	3.21
Career field change	2.86
Societal or community expectations	2.71

*The following paired differences are not statistically significant at $p = < .0005$: intellectual growth and satisfaction, organizational skills and salary increase, salary increase and job advancement, job advancement and career change, and career change and societal expectations.

As with those who already have a doctorate, those who are pursuing the degree appear to seek it primarily for intellectual growth and personal satisfaction.

No Plans to get a Doctorate. Forty-one of the superintendents said they do not have a doctorate and have no plans to get one. We asked for them to rate five possible reasons for not pursuing the doctorate. Table G-6 shows the ratings:

Table G-6

Reasons for Not Seeking a Doctorate
(Superintendents who do not have a doctorate and who are not enrolled and do not plan to enroll in a doctoral program)

<u>Reason</u>	<u>Mean Score*</u>
Can't afford the time	4.05
Family obligations interfere	3.87
Have felt no need of a doctorate	3.28
Can't afford the costs	3.27
No programs in reasonable proximity	3.15

*The following paired differences are not statistically significant at $p = < .0005$: Can't afford the time and family obligations, no need and can't afford the cost, no need and no programs nearby, and can't afford the cost and no programs nearby.

The bottom three reasons are statistically equal, as are the top two. Can't afford the time and family obligations are more important, generally, than no felt need, cost, or lack of a program in reasonable proximity. There are no differences between minorities and whites in the ratings of the reasons, men are more likely to say they felt no need than women, and superintendents in small districts rated all the reasons higher than those in the larger districts, but in the same order.

Other reasons offered by the respondents are:

- Retiring soon/too old (5 respondents)
- Doctorate lost importance because it could essentially be purchased (2)
- Not relevant (1)
- Too busy running school district (1)
- ACSA school academies provide practical training (1)
- Educate myself as needed (1)
- Am ABD (all but dissertation) (1)

Superintendent Views of the Importance of a Doctorate In Educational Administration/Leadership to do A Good Job As Superintendent or Principal

Superintendents were asked, "In terms of ability to do a good job as a Superintendent, a High School Principal, and an Elementary School Principal, how important is it that the person have a doctorate in Education Administration/Leadership?"

Tables G-7 and G-8 display the responses in percentage terms, and Tables G-9 and G-10 compare responses in terms of means. A scale of 1 to 5 was used, with 1 being "not important at all," and 5 being "very important." The key findings are:

- About 20% of all respondents in larger districts gave a low rating (1 or 2) to the importance of a superintendent having a doctorate in Education Administration/Leadership for doing a good job, while about 70% rated the importance high (4 or 5).
- About 39% of all respondents in larger districts gave a low rating to the importance of the doctorate for a high school principal to do a good job, while about 27% rated it high.
- About 54% of all respondents in larger districts gave a low rating to the elementary school principal's need for a doctorate, while about 14% rated it high.
- In small districts, higher percentages gave low ratings (1 or 2) than gave high ratings (4 or 5) for all three positions.
- As shown in Table G-9, significantly higher ratings of importance were given to superintendents than to high school principals, and to high school principals than to elementary school principals. This is true for both larger and smaller districts. Also, the differences between larger and smaller districts for each position are statistically significant.
- There is a substantial difference in the ratings given by persons who hold a doctorate and those who do not (see Table G-10). Possessors of a doctorate rated the importance of a doctorate to do a good job significantly higher for all three positions in both larger and small districts. Nearly 49% of respondents without a doctorate in the larger districts rated the importance low (ratings of 1 or 2), while only 8% of those with a doctorate gave this low rating.
- With respect to superintendents and high school principals, Ed.D.s in larger districts tended to give higher ratings to the importance of a doctorate in education administration/leadership than Ph.D.s (see Table G-10).

Superintendent Views of the Need For More Doctorates in Education in the Positions of Superintendent and Principal

Superintendents were asked this question: "Currently, about 48% of superintendents and 8% of principals in the California public schools have doctorates. On a scale from 1 to 5, does California need more persons possessing a doctorate in education in the positions of superintendent and principal?" A rating of 1 was labeled, "no need for more," and 5 indicated a "very great need for more."

The key findings, as displayed in Table G-11, are as follows:

- The need for more superintendents with a doctorate is rated higher than the need for more principals by respondents from both small and larger districts.
- Only slightly more than half (52.7%) of the respondents from large districts indicated a high need (ratings of 4 or 5) for more superintendents with a doctorate, while about

20% saw a low need (ratings of 1 or 2). In the small districts, the high-need rating for superintendent is lower (28.4%), and the low need rating is higher 43.1%.

- Only small percentages felt a high need for more principals with a doctorate (26.8% in larger districts and 13.5% in small districts).
- Not surprisingly, those respondents who hold a doctorate see a greater need than those who do not for more doctorates for both superintendents and principals—this is found in both larger and small districts.
- Females rated the need for doctorates higher than males for both superintendents and principals.

Superintendents were asked, if more doctorates are needed in either the principal or superintendent positions, what are the reasons? The objective was to gain an understanding of perceptions of the “value added” by doctoral training. Responses fell into the following categories:

- Symbolic value—public respect and credibility (12 respondents) Representative comments: (1) “The doctorate is an indication of one’s commitment to higher goals in a professional career.” (2) “Enhances respect for and credibility of position.” (3) “Increases public respect for the professionalism of the organization.” (4) “Symbolic value and status is most helpful.”
- Information base and knowledge base generally (10 respondents). Representative comments: (1) “I use the information I gained in my doctorate program every day.” (2) “Needed for breadth of knowledge.”
- Leadership and organizational development skills (8 respondents). Representative comments: (1) “Provides experience and knowledge base of leadership skills, . . . conflict resolution, group dynamics, and understanding of organizations.” (2) “Providing leadership in an educational organization requires knowledge, skills, and leadership similar to that required in corporate business organizations.”
- Research base and ability to analyze and use data (6 respondents). Representative comments: (1) “The problem-solving and analysis skills (including data analysis) are critical for today’s superintendent.” (2) “Ph.D. increases ability to analyze data and research presented by the public and media as ‘facts’ and to determine validity of conclusions.”
- Upgrade the profession (5). Representative comments: (1) “Upgrade profession, provide common tools or approaches.” (2) “The most important thing an administrator needs is to grow professionally.” (3) “I think it’s important for the profession.”

Other interesting comments included:

“More doctorates will support statewide reform efforts by ensuring that those who directly affect policy have a research base upon which to draw.”

"I cannot imagine being adequately prepared for the position [superintendent] without the training and experience gained from the doctorate."

"We must continue to do everything we can to enhance the importance of public education in California; an 'educated' leadership will help give us credibility, even if only symbolic."

"We probably have as many superintendents with doctorates as demanded by the system—we need to create the next supply of superintendent candidates. So principals need to get to work."

Superintendent Views of the Importance of Doctorates in Education in Central Office Administrative Positions.

The superintendents were asked "how important is it that a person in the following positions or roles in a public school district possess a doctorate in education?" Eleven central office positions/roles were listed and the ratings were on a scale of from 1 to 5 with 1 representing "not important at all" and 5 being "very important." (The term "roles" was intentionally used because in many districts several functions are the responsibility of one position, and this is more frequent the smaller the district.)

Table G-12 displays the ratings for larger districts and small districts. The top three are the same for both sizes of districts—deputy superintendent, associate superintendent, and head of research and evaluation. (It was shown in Appendix D that heads of research and evaluation employed in the public schools have one of the highest rates of doctorates.) Below the top three, adjacent positions in the rankings tend not to be statistically significantly different from the positions above or below. However, worthy of mention are the following observations:

- Head of staff development ranks higher than many other major positions such as compensatory education, business and finance, and special education.
- Head of compensatory education ranks low in both larger and small districts, a contrast with the relatively high percentage of persons in this position who possess a doctorate as observed in Appendix D.

Additional analyses revealed the following findings (not shown in tables):

- As could be surmised from inspection of the differences in the ratings between the larger and small districts shown in Table G-12, the small-district superintendents rate the importance of having an incumbent with a doctorate lower for all positions ($p = < .0005$), except for head of bilingual education.
- In the larger districts, with respect to all positions, there are no statistically significant differences between males and females or between persons who have a Ph.D. and an Ed.D. in the ratings of the importance of a doctorate.

- In the larger districts, superintendents who have a doctorate consistently rate the importance of having a doctorate higher than the superintendents who have no doctorate. The differences are statistically significant ($p = < .0005$) for all positions.
- In the larger districts, minority superintendents give higher ratings than Whites for the importance of having a doctorate to the positions of deputy and associate superintendent, head of bilingual education, head of compensatory education, and head of research and evaluation.
- In the larger districts, elementary-district superintendents give higher ratings for the importance of having a doctorate than high-school-district superintendents for all positions except deputy superintendent, head of business/finance, and head of compensatory education. Similarly, superintendents of unified districts give higher ratings than their high-school-district counterparts for all positions except deputy and associate superintendent, head of bilingual education, head of business/finance, and head of curriculum/instruction. There are no statistically significant differences between the ratings of the elementary- and unified-district superintendents for any position.

Symbolic Value, Accreditation, and Preferred Types of Doctorates in Education

Symbolic value versus training value. As indicated above, a number of superintendents highlighted the symbolic value of the doctorate—the credibility it gives the administrator in the district and in the community—as one of the main reasons why more doctorates are needed in the positions of superintendent and principal. The survey also explicitly asked all respondents to compare the symbolic value and the training value of the doctorate in education. (For this variable, the lower the rating score, on a scale of 1 to 5, the greater the importance given to symbolic value over training value.)

In the larger districts, the superintendents are about equally divided between the symbolic and the training values. As shown in Table G-13, 34.0% of the respondents said the symbolic value was “somewhat” or “far more” important than the value of the training; while 36.6% indicated that the value of the training was greater. These views really do not say anything about the quality of the training—it could be very high or very low in either case. Thus, the training could be very poor and the symbolic value could still be quite high.

The small-district superintendents rate the symbolic value slightly higher than the larger-district leaders (an average rating of 2.62 versus 3.06). In the small districts, nearly half the respondents (48.2%) consider the symbolic value more important than the training, while only 22.9% rate the training higher.

Persons who do not have a doctorate, in both larger and small districts, rate the symbolic value higher than those with a doctorate. Presumably, those without a doctorate consider themselves to be doing a good job without it and, therefore, the training would not be as important as the added credibility and prestige.

Minority superintendents in small districts scored the symbolic value significantly higher (1.50 versus 2.67) than White superintendents.

The importance of accreditation. In our interviews with public school executive search firms (see Appendix F), it was found that the main concern of school board members about the doctorate in education was that it not come from a "diploma mill," suggesting that such a doctorate is a negative rather than a positive attribute. It was also pointed out above by two superintendents that they have not sought the doctorate in education because it had been cheapened to the point where it can be "purchased." Despite these negative views, a substantial number of the education professionals who responded to the survey did not reply that a doctorate from an accredited institution was "very important" or "extremely important."

The majority of superintendents in the larger districts (58.6%) indicated that it is "very important" or "extremely important" that the doctorate be earned at an accredited IHE (see Table G-14). However, a substantial minority (more than one out of five) indicated that it is "minimally important" or "not important" that the institution be accredited, and another 17% responded that it is only "somewhat important." Superintendents in small districts are slightly less impressed by a degree from an accredited IHE than the larger district CEOs.

Other findings are:

- Superintendents who do not possess the terminal degree are more likely to give less weight to accreditation than those who hold a doctorate.
- Female superintendents in larger districts think accreditation is slightly more important than male leaders.

Ed.D. versus Ph.D. in education. Perhaps the strongest consensus among the superintendents is that it doesn't matter, for purposes of advancement in education administration, whether the doctorate is an Ed.D. or a Ph.D. About 90% of the larger-district superintendents and 96% of those in small districts indicated that there is no difference (see Table G-15).

Those who think there is a difference are almost all persons with a Ph.D.--and 100% of these think the Ph.D. is the preferred degree for advancement in education administration. The very small number of Ed.D.s who think one or the other of the type is preferable are true to their colors, all stipulating that the Ed.D. is the preferred degree.

The Ph.D.s, in explaining their preference, cited additional coursework in research statistics, more rigorous original research, higher prestige, greater symbolic value, and higher status and credibility inside and outside the education system as aiding advancement in the administrative ranks.

The two Ed.D.s who indicated a preference for their degree emphasized the practical nature of the training, indicating that the Ph.D. is "philosophical" and focused on "theory."

Prescriptions for the Content of Doctoral Programs in Education Administration/Leadership

Three groups (public school superintendents, deans of doctoral programs in Education Administration/Leadership, and CSU deans of schools of education) were asked to identify the five most important skills, abilities, areas of knowledge, and experiences that a doctoral program in Education Administration/Leadership should provide the participants (in the case of deans of such doctoral programs, they were asked what their programs offer, rather than what they should offer). In a later chapter we will compare the responses of the three groups. Here the responses of the superintendents are examined.

Superintendents were given a list of skills, abilities, areas of knowledge, and experiences (culled from the literature and from a focus group of superintendents), and were asked to select the five most important. (Space was provided at the bottom of the list for the addition of items that were not included on the list.). Tables G-16 and G-17 summarize the results.

From the perspective of the superintendents, the priority goals of a doctoral program in Education Administration/Leadership should be the development of leadership skills. The top five skills for the superintendents of larger districts and the top two for those in small districts are leadership-related. These are followed in both cases by specific areas of knowledge—school finance, instructional methods, and politics of education for the small-district leaders, and instructional methods, politics of education, statistical analysis, and school finance for the larger-district CEOs.

Acquiring professional contacts and establishing networks ranks sixth-highest for the small-district superintendents. At the bottom of the list for these leaders are the more amorphous or less practical areas of a discipline-based dissertation, knowledge of ethical dimensions, broad perspective on education in history and society, and broad theoretical knowledge.

The superintendents of larger districts see little value in the dissertation, whether practical or discipline-based, and typically are not interested in anything broadsweeping—whether history or theory.

A cluster analysis differentiated two subgroups within each of the district-size groups. As shown in Table G-18, each subgroup is based on the five skill or knowledge areas with the highest percentage of mentions by superintendents in that subgroup, and all superintendents are assigned to one or the other of the subgroups.

Table G-18

**Preferences for Content of Doctoral Programs in Education Administration/Leadership
by School District Size**

Larger Schools

<u>Subgroup</u>	<u>Skill Area</u>	<u>Percent of Superintendents in this Subgroup Supporting This Priority</u>
L-1 (56 Supts.)	Change-agent skills	83.4
	Leadership skills	72.9
	Communication skills	61.8
	Knowledge of organizational theory	57.9
	Leadership in an organization characterized by diversity	40.0
L-2 (36 Supts.)	Knowledge of instructional methods	69.5
	Knowledge of school finance	58.8
	Knowledge of organizational theory	46.3
	Leadership in an organization characterized by diversity	41.5
	Knowledge of the politics of education	35.0

Small Schools

<u>Subgroup</u>	<u>Skill Area</u>	<u>Percent of Superintendents in this Subgroup Supporting This Priority</u>
S-1 (16 Supts.)	Change-agent skills	79.9
	Leadership Skills	64.4
	Knowledge of school finance	45.4
	Networks and contacts	41.2
	Data and Statistical analysis skills	35.3
S-2 (8 Supts.)	Knowledge of the politics of education	67.3
	Dissertation addressing a practical problem	66.7
	Knowledge of instructional methods	66.3
	Leadership in an organization characterized by diversity	66.3
	Knowledge of school finance	43.9

The larger-district superintendents in Subgroup L-1 (56 superintendents) think that a doctoral program in Education Administration/Leadership should emphasize the development of leadership abilities. Those in L-2 (36 superintendents) want their programs to impart knowledge of instructional methods, school finance, organizational theory, and the politics of education.

In subgroup S-1, the small-district superintendents give highest priority to leadership skills, but would balance this with school finance, networks and contacts, and data and statistical analysis

skills. Subgroup S-2 is seeking practical information in school finance, instructional methods, and the politics of education, perhaps as a basis for a dissertation addressing a practical problem.

Alternative Training for Principals

Having covered from several different angles the views of superintendents about the doctorate in education, this chapter ends with their opinions on whether there are any professional development programs for principals that provide training as beneficial as a doctoral program in Education Administration/Leadership.

Table G-19 reveals that the larger-district superintendents are split about fifty-fifty on this question, while the small-district superintendents have no doubt there is good alternative training for principals (87.9% replied "yes").

As would be expected, those who do not hold a doctorate are more likely to see the availability of sound alternatives to a formal doctoral program, but even one-third of those possessing a doctorate admit of feasible alternatives for principals.

Interesting is the difference between minorities and Whites, with the former putting much less faith in alternative programs than the latter. (It should be noted that in larger districts, 80.5% of the minorities have doctorates compared to 65% for the Whites; thus, a greater incidence of no doctorate among the minority superintendents does not account for the difference in their views on alternative training. Within the minority group, of those who hold a doctorate, 70.8% responded that there are no viable alternative programs for principals.)

Respondents who indicated there are good alternatives were asked to name them. The counts of mentions are as follows:

ACSA Academies	26
California School Leadership Academies	26
UCLA Principal Institute	4
Harvard Principal's Center	4

Table G-1

Superintendent Sample Response

LARGER DISTRICTS

District Type	2500-7499		District Size 7500-14999		>= 15000		Total	
	Sample size	# of Respondents	Sample size	# of Respondents	Sample size	# of Respondents	Sample size	# of Respondents
Larger Districts								
Elementary	28	24	9	6	4	3	41	33
High School	8	7	4	3	4	3	16	13
Unified	27	23	17	11	22	19	66	53
Total	63	54	30	20	30	25	123	99

SMALL DISTRICTS: < 2,500 Enrollment

Small Districts	Sample size # of Respondents	
Elementary	37	18
High School	5	4
Unified	8	6
Total	50	28

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Table G-2

Characteristics of Superintendent Sample

		Average	Percentage	Percentage by Type of Doctorate				Percentage by District Size				Percentage by District Type		
	# of	Total Years	with		Ph.D. in	Other								
Group	Cases	As Supt.	Doctorate	Ed.D.	Education	Ph.D.	D.P.A.	< 2500	2500-7499	7500-14999	> + 15000	Elem	HS	Unified
Larger Districts														
Male	61	10.1*	67.0	78.4	14.2	7.5	0.0	---	60.7	17.8	21.5	38.8	6.7	54.5
Female	38	6.5*	68.5	66.7	25.3	0.0	3.4	---	42.5	24.1	33.3	26.4	14.9	58.6
African American	2	5.0	50.0	100.0	0.0	0.0	0.0	---	0.0	0.0	100.0	0.0	0.0	100.0
Asian	3	12.6	70.0	42.9	0.0	0.0	57.1	---	100.0	0.0	0.0	30.0	0.0	70.0
American Indian	1	5.0	100.0	100.0	0.0	0.0	0.0	---	0.0	100.0	0.0	0.0	0.0	100.0
Hispanic	7	5.3	95.0	63.2	21.1	0.0	0.0	---	35.0	20.0	45.0	45.0	5.0	50.0
White	84	9.0	65.0	75.3	19.2	5.5	0.0	---	56.0	20.3	23.6	32.0	14.6	53.4
Other	2	6.5	100.0	50.0	50.0	0.0	0.0	---	50.0	0.0	50.0	100.0	0.0	0.0
Total Minority	13	7.0	81.4	76.1	11.9	0.0	12.1		41.7	18.4	40.0	31.1	2.5	66.4
Total	99	8.7	67.6	74.7	19.0	4.7	1.6	---	53.6	20.3	26.1	33.8	10.4	55.9
Small Districts														
Male	19	8.0*	17.1	100.0	0.0	0.0	0.0	100.0	---	---	---	59.3	18.1	22.7
Female	8	5.3*	40.8	72.5	27.5	0.0	0.0	100.0	---	---	---	76.5	0.0	23.5
Asian	1	8.0	0.0	0.0	0.0	0.0	0.0	100.0	---	---	---	0.0	0.0	100.0

Hispanic	1	7.0	0.0	0.0	0.0	0.0	0.0	100.0	---	---	---	100.0	0.0	0.0
White	23	6.8	23.0	81.4	18.6	0.0	0.0	100.0	---	---	---	62.1	14.9	23.0
Other	2	9.8	60.0	100.0	0.0	0.0	0.0	100.0	---	---	---	100.0	0.0	0.0
Total	27	7.2	24.5	85.2	14.8	0.0	0.0	100.0	---	---	---	64.6	12.4	22.9

* Significantly different $p = < .0005$

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Table G-3

Characteristics of Superintendent Doctorates in California

Groups Compared	Mean Years					
	Since Receiving Doctorate	From Baccalaureate To Doctorate	In Doctoral Program	While in Doctoral Program		
				As Full-time Student	As Teacher or Counselor	As Administrator
Male	14.5	17.1*	4.4	0.1	0.4	3.9
Female	14.8	20.0*	5.0	0.1	0.2	4.5
Ph.D.s	14.0	19.2	4.5	1.1*	0.5	4.1
Ed.D.s	12.1	18.8	4.5	0.3*	0.2	4.3
Small Districts	9.9*	20.3	4.4	1.4*	0.1	4.4
Larger Districts	13.3*	18.2	4.8	0.1*	0.3	4.1
Minority	9.9	18.6	5.2	0.2	0.2	4.1
White	12.5	18.6	4.5	0.5	0.3	4.2
Total	12.5	18.8	4.6	0.4	0.3	4.2

*Significantly different $p = < .0005$

CPEC supt survey/sheet 3

Table G-7

Need for Doctorate To Do A Good Job by Position

Districts With More than 2,500 Enrollment

Position/Respondent Group	N	Percentage of Respondents				
		Not Important At All				Very Important
		<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>
<u>Superintendent</u>						
All Respondents	97	12.2	9.2	8.6	28.6	41.4
Respondents With Doctorate	66	7.0	1.1	2.3	32.4	57.2
Respondents Without Doctorate	31	32.6	17.2	31.7	17.0	1.4
<u>High School Principal</u>						
All Respondents	96	20.2	18.9	34.2	20.3	6.4
Respondents With Doctorate	65	7.6	14.1	39.6	25.9	12.9
Respondents Without Doctorate	31	52.6	21.2	26.3	0.0	0.0
<u>Elementary School Principal</u>						
All Respondents	96	27.5	26.4	32.3	8.4	5.4
Respondents With Doctorate	65	13.2	21.9	43.9	9.1	11.8
Respondents Without Doctorate	31	60.9	29.5	9.5	0.0	0.0

CPEC SUPT need for doctorate/sheet1

Table G-8

Need for Doctorate To Do A Good Job by Position

Districts With Less than 2,500 Enrollment

Position/Respondent Group	N	Percentage of Respondents				
		Not Important At All				Very Important
		<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>
<u>Superintendent</u>						
All Respondents	28	29.6	10.6	27.9	19.5	12.4
Respondents With Doctorate	6	15.8	0	0	30.9	53.2
Respondents Without Doctorate	22	33.8	13.8	36.4	16	0
<u>High School Principal</u>						
All Respondents	28	43.8	17	30.4	3.5	5.3
Respondents With Doctorate	6	15.8	14.8	32	14.8	22.6
Respondents Without Doctorate	22	52.4	17.7	29.9	0	0
<u>Elementary School Principal</u>						
All Respondents	28	50.9	25.8	18.1	0	5.3
Respondents With Doctorate	6	15.8	14.8	46.8	0	22.6
Respondents Without Doctorate	22	61.5	29.1	9.3	0	0

CPEC SUPT need for doctorate/sheet1

Table G-9

Need for Doctorate to do a Good Job in Position

(Scale of 1 to 5 with 5 = Very Important)

Position	Larger Districts	Small Districts
Superintendent	3.78	2.75
High School Principal	2.74	2.09
Elementary School Principal	2.38	1.83

All differences significant at $p < .0005$.

CPEC SUPT need for doctorate/sheet2

Table G-10

Need for Doctorate to do a Good Job in Position
(Scale of 1 to 5 with 5 = Very Important)

	With Doctorate	No Doctorate	Female	Male	Ed.D.	Ph.D.	Minority	White
<u>Larger Districts</u>								
Superintendent	4.41*	2.44*	3.87	3.72	4.54*	4.01*	4.34	3.69
High School Principal	3.26*	1.64*	2.74	2.74	3.42*	2.81*	3.20	2.68
Elementary School Principal	2.79*	1.51*	2.39	2.37	2.93	2.46	2.79	2.33
<u>Small Districts</u>								
Superintendent	4.06*	2.35*	3.01	2.53	3.89	5.00	1.99	2.66
High School Principal	3.14*	1.78*	2.18	1.98	2.99	4.00	1.00*	1.98*
Elementary School Principal	2.99*	1.48*	2.06	1.71	2.99	3.00	1.00*	1.72*

* Difference significant at $p = < .0005$

CPEC SUPT need for doctorate/sheet2

Table G-11

Need for More Doctorates in Positions
(Scale of 1 to 5 with 5 = very great need for more)

	Larger Districts		Small Districts	
	Superintendent	Principal	Superintendent	Principal
All Respondents (mean)	3.71*	3.00*	2.79*	2.25*
All Respondents (percentages)				
Rating Score = 1 (no need for more)	13.8	20.0	29.5	38.4
2	7.9	17.0	13.6	24.7
3	16.2	27.7	24.8	19.7
4	27.4	18.0	16.0	7.2
5 (Very great need for more)	25.3	8.8	12.4	5.3
Don't Know	9.5	8.5	3.6	3.6

Respondent Groups

(Statistical comparisons are between respondent groups within positions)

Respondent has doctorate	4.20*	3.46*	3.83*	3.30*
Respondent has no doctorate	2.73*	2.15*	2.47*	1.93*
Ph.D.	4.20	3.10	5.00	4.00
Ed.D.	4.10	3.50	3.83	3.18
Minority	4.47	3.78	2.49	1.50
White	3.61	2.95	2.67	2.14
Male	3.41*	2.70*	2.54	2.11
Female	4.20*	3.59*	2.95	2.42

Larger Districts	3.71*	3.00*
Small Districts	2.79*	2.25*

* Statistically significant difference $p = < .0005$

CPEC SUPT need for doctorate/sheet3

Table G-12

Importance of Having More Doctorates in Specified Positions or Roles in the Public Schools

<u>Administrative Position</u>	Larger Districts	<u>Administrative Position</u>	Small Districts
	All Respondents <u>Mean Score</u>		All Respondents <u>Mean Score</u>
Deputy Superintendent	3.67	Deputy Superintendent	2.88
Associate Superintendent	3.56*	Associate Superintendent	2.74
Head of research & evaluation	3.46*	Head of research & evaluation	2.74
Head of curriculum & instruction	3.20	Head of curriculum & instruction	2.27*
Head of staff development	2.80**	Head of bilingual education	2.16*#
Head of personnel	2.67***+	Head of staff development	2.06*#\$
Head of pupil services	2.64***+#	Head of personnel	1.94#\$**
Head of special education	2.61+#	Head of special education	1.88***+
Head of finance/business	2.48#\$	Head of pupil services	1.87#+&
Head of bilingual education	2.41\$	Head of compensatory education	1.83#***+&%
Head of compensatory education	2.32\$	Head of finance/business	1.72+%

*, **, +, #, \$, &, % Positions that share these symbols do not have statistically significantly different values.

CPEC admin positions need for doc/sheet1

Table G-13

Symbolic Value Versus Training Value of the Doctorate in Education

(Scale of 1 to 5 with 1= symbolic value far more important and 5 = symbolic value far less important than training)

	<u>Larger Districts</u>	<u>Small Districts</u>
All Respondents (mean)	3.06*	2.62*
All Respondents (percentages)		
Rating Score = 1 (symbolic value far more important)	11.7	32.2
2 (symbolic value somewhat more important)	23.8	16.0
3 (symbolic and training value equal)	27.9	28.9
4 (symbolic value somewhat less important)	19.6	3.6
5 (symbolic value far less important)	17.0	19.3

Respondent Groups

(Statistical comparisons are between respondent groups within district size)

Respondent has doctorate	3.24*	3.43*
Respondent has no doctorate	2.70*	2.37*
Ph.D.	3.09	3.00
Ed.D.	3.27	3.51
Minority	3.55	1.50*
White	3.01	2.67*
Male	3.07	2.60
Female	3.05	2.77

* Statistically significant difference $p = < .0005$

CPEC admin positions need for doc/sheet2

Table G-14

Importance for Advancement That Doctorate be from an Accredited IHE
 (Scale of 1 to 5 with 1 = extremely important that it be from an accredited IHE
 and 5 = not important that it be from an accredited IHE)

	<u>Larger Districts</u>	<u>Small Districts</u>
All Respondents (mean)	2.42*	2.91*
All Respondents (percentages)		
Rating Score = 1 (accreditation extremely important)	34.0	16.3
2 (accreditation very important)	24.6	19.9
3 (accreditation somewhat important)	17.5	35.3
4 (accreditation minimally important)	13.2	13.9
5 (accreditation not important)	10.7	14.6

Respondent Groups

(Statistical comparisons are between respondent groups within district size)

Respondent has doctorate	2.05*	2.51
Respondent has no doctorate	3.19*	3.03
Ph.D.	2.18	5.00*
Ed.D.	2.04	2.08*
Minority	2.31	4.01*
White	2.41	2.85*
Male	2.66*	2.94
Female	2.05*	3.00

* Statistically significant difference $p = < .0005$

CPEC admin positions need for doc/sheet3

Table G-15

Desirability of Ed.D. and Ph.D.

	Percentage of Respondents				
	Larger Districts			Small Districts	
	<u>YES</u>	<u>NO</u>	<u>Don't Know</u>	<u>YES</u>	<u>NO</u>
Does it matter for advancement whether an education doctorate is an Ed.D. or a Ph.D.?	9.3	89.6	1.1	3.6	96.4
Respondents with Ph.D.	33.3	60.4	6.3	0.0	100.0
Respondents with Ed.D.	1.9	98.1	0.0	0.0	100.0

Of those who answered yes to above question:

	<u>Ph.D.</u>	<u>Ed.D.</u>	<u>Ph.D.</u>	<u>Ed.D.</u>
Preferred Type of Doctorate	89.1	10.9	100.0	0.0
Ph.D.s with a preferred type of doctorate	100.0	0.0	na	na
Ed.D.s with a preferred type of doctorate	0.0	100.0	na	na

CPEC admin positions need for doc/sheet4

Table G-16

**Most Important Skills, Abilities, Knowledge, and Experiences That a
Doctoral Program in Education Administration/Leadership Should Provide***

Larger School Districts

<u>What a Doctoral Program in Education Administration/Leadership Should Provide</u>	<u>Percentage of Superintendents Answering Yes</u>
Change-agent skills	61.1
Knowledge of organizational theory and related research	53.3
Leadership skills	48.5
Communication skills	47.8
Capacity to provide leadership in an organization characterized by diversity	40.9
Knowledge of instructional methods and related research	39.5
Data and statistical analysis skills	34.0
Knowledge of politics of education and related research	27.9
Knowledge of school finance and related research	27.7
Clinical practice involving field-based problem solving	22.9
Professional contacts and networks	19.0
Broad perspective on education in history and society	15.0
Completion of a dissertation addressing a practical problem	13.2
Knowledge of research methods	13.0
Self-confidence	10.9
Completion of a discipline-based dissertation	9.8
Knowledge of the ethical dimensions of schooling	8.7
Broad theoretical knowledge in the social sciences	3.3
<u>Open-ended additions</u>	
Policy Analysis skills	1.2
Facilitation skills/conflict resolution/group dynamics	1.2
Negotiation skills	1.1
Critical thinking processes	1.1

* Superintendents were asked to indicate the five most important skills, abilities, areas of knowledge, and experiences

that a doctoral program in Education Administration/Leadership should provide from the list given above.

Additional lines were provided for the addition of "Other" program goals at the respondent's discretion.

CPEC SUPT doc program preferences/sheet1

Table G-17

**Most Important Skills, Abilities, Knowledge, and Experiences That a
Doctoral Program in Education Administration/Leadership Should Provide***

Small School Districts

<u>What a Doctoral Program in Education Administration/Leadership Should Provide</u>	<u>Percentage of Superintendents Answering Yes</u>
Change-agent skills	62.6
Leadership skills	55.2
Knowledge of school finance and related research	44.8
Knowledge of instructional methods and related research	37.3
Knowledge of politics of education and related research	36.6
Professional contacts and networks	36.2
Capacity to provide leadership in an organization characterized by diversity	34.1
Knowledge of organizational theory and related research	33.4
Data and statistical analysis skills	30.4
Clinical practice involving field-based problem solving	24.9
Completion of a dissertation addressing a practical problem	24.7
Communication skills	20.3
Knowledge of research methods	16.5
Self-confidence	16.5
Completion of a discipline-based dissertation	8.3
Knowledge of the ethical dimensions of schooling	8.5
Broad perspective on education in history and society	4.2
Broad theoretical knowledge in the social sciences	0.0

Open-ended additions

Facilitation skills/conflict resolution/group dynamics

4.0

- * Superintendents were asked to indicate the five most important skills, abilities, areas of knowledge, and experiences that a doctoral program in Education Administration/Leadership should provide from the list given above. Additional lines were provided for the addition of "Other" program goals at the respondent's discretion.

CPEC SUPT doc program preferences/sheet2

Table G-19

Are There Good Alternatives to Doctoral Training Available for Principals

Respondent Group	Percentage Responding					
	Larger Districts			Small Districts		
	YES	NO	Don't Know	YES	NO	Don't Know
All Respondents	46.0	44.7	9.2	87.9	12.1	0.0
Have a Doctorate	34.2	55.6	10.2	68.8	31.2	0.0
Have no doctorate	70.1	22.7	7.2	94.5	5.5	0.0
Ed.D.s	34.7	60.4	4.9	63.6	36.4	0.0
Ph.D.s	37.0	41.3	21.7	100.0	0.0	0.0
Minority	10.7	75.0	14.3	50.0	50.0	0.0
White	51.0	40.1	8.9	89.4	10.6	0.0
Male	48.6	44.0	7.4	86.7	13.3	0.0
Female	41.9	46.2	12.0	88.8	11.2	0.0

CPEC SUPT alternatives to doctoral training/sheet1

This chapter presents a "doctoral" profile of Chancellors, Superintendents, and Presidents, examines their reasons for obtaining or not obtaining a doctorate, analyzes their preferences for specific types of doctorates, examines the CEOs views of the supply of and demand for doctorates in community college administrative positions, explores alternatives to doctoral training, and concludes with an Inventory of Doctorates in Administrative positions at the campus level.

Doctoral Profile of Chief Executive Officers in the Community Colleges

Most of the information presented in this and following sections is based on responses to a questionnaire sent in June, 2000, to 128 Chancellors, Superintendents, and Presidents of all community college districts and colleges. One hundred nine surveys were completed and returned—a response rate of 85.2%. The questionnaire is Appendix ____.

Overview. Eighteen Chancellors responded to the survey and 91 Superintendent/Presidents (S/P). As shown in Table H-1, more than four out of five of the community college Chief Executive Officers (CEOs) possess a doctorate. Chancellors are more likely to have a Ph.D. (as opposed to an Ed.D.) than campus CEOs:

- 60% of Chancellor doctorates are Ph.D.s, while only 39.5% of S/P doctorates have a Ph.D., favoring instead the Ed.D. (56.6%).
- The three S/Ps who do not have either a Ph.D. or an Ed.D. have a Juris Doctorate, a Doctorate in Public Administration, and a Doctorate of Arts.

The CEOs have earned their advanced degrees at universities all over nation.

Forty-five institutions, as shown in Table H-2, have contributed to the leadership of the community colleges in California, with only the University of Southern California accounting for more than 7 percent. Perhaps one of the strengths of community college leadership in California is the many different institutions that have influenced its leadership, fostering a wide variety of views and approaches.

Equally diverse are the doctoral program specializations reported by the CEOs. Table H-3 displays the reported specializations--reproduced verbatim from the questionnaires. One might ask whether the many different specialization labels in the "administration" category represent differences in the content of doctoral programs, differences in the conceptions of the schools of education as to what they are trying to accomplish, or differences in the views of the CEOs of their training.

It is often said that for a CEO to understand the trials and tribulations of the faculty and to be able to lead them in resolving issues, he or she should have training in an academic discipline and demonstrated scholarly accomplishments. As one CEO said,

"My doctorate in subject has given me instant credibility with faculty throughout my career."

Nevertheless, only about 28% of the community college CEOs in California who have a Ph.D. have been trained in an academic discipline outside of education. The issue of Ed.D. in education vs. Ph.D. in education vs. Ph.D. in another discipline is investigated further below.

CEOs by Ethnicity and Gender. Among the survey respondents, only three of the eighteen Chancellors are women, but 37 (41%) of the campus CEOs are women (see Table H-4). The survey reveals that women are slightly more likely to possess a doctorate than men at both the district and campus levels.

In general, there is little difference across ethnicities in terms of the percentage of CEOs who hold a doctorate. Taking into account all Chancellors, Superintendents, and Presidents, between 80 percent and 90 percent of the incumbents in each ethnicity have a doctoral degree (except for the American Indians where all three possess a doctorate). However, four subgroups have slightly lower doctorate rates:

- 77% of White male campus CEOs possess a doctorate.
- 75% of African American Superintendent/Presidents have the terminal degree.
- 75% of the four Hispanic Chancellors have a doctorate.
- 71% of the seven female Hispanic campus CEOs possess a doctoral degree.

Timelines. The vast majority (87.5%) of the 16 CEOs who earned their doctorates less than ten years ago hold Ed.D.s rather than Ph.D.s as shown in Table H-5. Those who acquired doctorates more than ten years ago are evenly split between Ph.D.s and Ed.D.s, except that 59.1% of those who received their doctorates between 1975 and 1979 have Ed.D.s (three of the six NOVA doctorates were earned during this period).

Many community college leaders did not acquire the doctorate until their late thirties, the median time from baccalaureate to doctorate being 15 years (see Table H-6). Male Ph.D.s have the least amount of time from undergraduate school to terminal degree, averaging 11.5 years. African American males have the highest average time (19.8 years) from bachelors to doctorate.

Also displayed in Table H-6 are means and medians for the number of years in a doctoral program. There is virtually no difference between Ph.D.s and Ed.D.s in the length of time that was required to earn the degree. The only clearcut difference along this dimension concerns African Americans who had a median number of years in their programs of seven (five of these were Ph.D.s and four were Ed.D.s), compared to an average of 4.6 years for all doctorates.

Ph.D.s spent much more of their time while in doctoral programs as full-time students than Ed.D.s. Ph.D.s were full-time students for about two years, on average, compared to an average of 0.4 years and a median of zero years for those pursuing the Ed.D. Table H-6 indicates that many Ed.D.s worked full-time as education administrators while earning their doctorates, while more than half of the Ph.D.s spent no time as an administrator while studying

for their doctorate. Of 13 CEOs who earned Ed.D.s in the 1990s, eight worked as an administrator during the entire period of their doctoral program, two worked 75% to 80% of the time, two worked 50% to 75% of the period, and only one reported no time as an education administrator while pursuing the doctorate. Consistent with the longer period of time they spent in their doctoral programs, African Americans logged the most time (5.8 years on average) as administrators while earning the degree.

Finally, Table H-7 shows that the vast majority of community college CEOs have spent the bulk of their education administration careers as administrators in the community colleges. It can be reported (not shown in the table) that 77% have not worked as administrators in 4-year colleges and 90% have not worked as administrators in K-12 institutions. However, 11% have spent more than five years in 4-year colleges and 6% worked seven or more years as K-12 administrators.

Why They Acquired a Doctorate. The responses summarized in Table H-8 shed some light on why the CEOs pursued the doctoral degree. The primary reasons were (in order of mention, but with little difference between):

- Job advancement and promotion
- Intellectual growth
- Personal satisfaction
- Organizational and leadership skills

Substantially less important were:

- Societal or community expectations
- Salary increase
- Career field change

Since many of these CEOs earned their doctorates many years ago, the responses of those attaining the degree in the 1990s (mostly Ed.D.s as indicated above) were examined. No striking differences were found between the "newcomers" and the "old-timers" in their reasons for pursuing the doctorate.

CEOs who have doctorates were asked how important the doctorate was for securing their present position and how helpful it was as preparation for their current responsibilities. As shown in Table H-9, about two-thirds (65.9%) feel the doctorate was "essential" in securing their present position. Thus, about one out of three do not think it was "essential."¹ While five out of six White males (83.3%) think the degree was "essential," only 22.2% of African Americans, 50% of Asians, 53.8% of Hispanic males, and 61.1% of women felt it was "essential."

As shown in Table H-10, about 75% of the CEOs indicate that the doctorate is "essential" or "very helpful" in carrying out their job responsibilities. Thus, one out of four CEOs is relatively unenthusiastic about the contribution that their doctoral training has made to their

¹ There is clearly a qualitative difference between "essential" and "very helpful" in the perceived importance of possessing a doctorate for securing a position. It is more appropriate to combine the two categories when assessing the impact of the degree on preparation for current responsibilities, as is done in the next paragraph.

ability to do their jobs. Subgroups that were not very keen on the doctorate as preparation are: African American women (25% "essential" or "very helpful") and American Indian males (33%, but only 3 incumbents). Further analysis of the data also reveals:

- Of the 22 Ph.D.s who specialized in a subject other than education, ten found their degree "essential" or "very helpful," and nine said it was "somewhat" or "minimally" helpful.
- Of the 17 Ph.D.s who specialized in Higher Education Administration and related fields, sixteen found the degree "essential" or "very helpful," and only one found it "somewhat" or "minimally" helpful.
- Of the 41 Ed.D.s who specialized in Higher Education Administration and related fields, 31 found their doctorate "essential" or "very helpful," but ten indicated it was "somewhat" or "minimally" helpful in carrying out their current responsibilities.
- Of the 9 Ed.D.s who specialized in fields other than administration, five said their degree was "essential" or "very helpful," and two (the Ed.D.s in Plant Physiology² and Linguistics) said it was less than very helpful.

Chief Executive Officers Who Do Not Have A Doctorate

Of the 109 CEOs responding to the survey, 18 (16.5%) do not have a doctorate. Of these, five are enrolled (or are planning to enroll) in a doctoral program, while the balance do not plan to pursue the doctorate. These two groups are the subjects of the next two subsections.

Doctoral Candidates. The five CEOs enrolled in, or planning to enroll in, a doctoral program are a diverse group of campus leaders as shown in Table H-11. These leaders were asked their reasons for pursuing the doctorate and the responses are displayed in Table H-12. While the responses are similar to those given by CEOs who already have their doctorate, there are several interesting differences:

- The doctoral candidates give more weight to "societal and community expectations" as a reason for pursuing the doctorate than the executives who attained the degree years ago. Perhaps this difference reflects the fact that the candidates are already in top level positions and feel a need for the doctorate in dealing with faculty and community.
- The doctoral candidates give much less weight to "salary increase" than the CEOs who already have a doctorate (many of whom probably earned their degrees before attaining the CEO position). Clearly, this reflects the candidates executive position and is consistent with inconclusive evidence that many community colleges do not provide salary increments for an administrator who attains a doctorate.³

CEOs Who Are Not Pursuing a Doctorate. Among the respondents to the survey, 10 campus CEOs and 3 Chancellors indicated that they do not have a doctorate and do not plan to pursue one. Three of these said they plan to retire soon, and one said that acquiring two masters

² The Ed.D. in Plant Physiology was followed-up by email and found to be accurate.

³ A Community College Leadership Development Initiative survey in the Spring of 1999 found that only about a third of the respondents indicated their institutions gave salary recognition for completion of advanced degrees.

degrees was sufficient. As shown in Table H-13, "cannot afford the time" is the leading reason for not going after the doctorate. Six CEOs indicated some concern about the proximity of a doctoral program, but for five this issue was "not important at all."

Expectations and Preferences Regarding the Doctorate

In this section data will be presented regarding expectations that holders of various CC administrative positions have a doctorate and concerning CEO views of who should have a doctorate and which type is preferable. CEOs are also asked whether the symbolic value of the doctorate outweighs the utility of the training, and how important it is that the doctorate be from regionally-accredited as opposed to non-accredited institutions.

Expectations and Preferences for Executive Positions. The CEOs were asked whether the doctorate was generally expected in their districts for five leadership positions. They were also asked whether they felt that incumbents of these positions should be expected to hold a doctorate.

The responses (see Table H-14) indicate a surprisingly low level of expectations in their districts that incumbents should hold doctorates in the positions of VP/Dean of Instruction and VP/Dean of Student Services—50.0% in the former case and only 32.1% in the latter. These expectations are slightly below the incidence of doctorates in these positions that was found in our Inventory of Doctorates in Community College Administrative Positions presented below. In the inventory, it was found that 56.4% of Chief Instructional Officers and 45.9% of Chief Student Services Officers hold doctorates.

Expectations that incumbents hold doctorates in the positions of Chancellor and Campus President were significantly higher than for the Vice-Presidents, but still they were only 88.0% for Chancellors and 79.4% for Campus Presidents. Expectations that Deans of Occupational/Vocational Education possess a doctorate were extremely low—6.6%.

The data indicate that the CEOs think there should be greater expectations for Vice-Presidents to have a doctorate. About 70% of the CEOs responded that Vice-Presidents for Instruction should be expected to possess doctorates, and 55% that Vice-Presidents for Student Services should be expected to possess a doctoral degree.

Table H-15 displays the views of subgroups of CEOs on these issues and reveals the following:

- Not surprisingly, CEOs who do not have a doctorate are much less likely than those who hold a doctorate to respond that the degree should be expected of Vice-Presidents and of Campus Presidents
- Ed.D.s are less likely than Ph.D.s to indicate that the Vice-Presidents should be expected to have a doctorate.
- And, in an interesting agreement between "new docs" and "old docs," those who received their degrees most recently and longest ago have slightly higher expectations for Vice-Presidents for Instruction than those who received their doctorates in the years in-between. A similar difference is found in their views of the need to hold doctorates by Deans of Occupational/Vocational Education.

Turning now to the type of doctorate that is preferable for various positions (see Table H-14), there is a very small cadre of CEOs that prefer the Ph.D. in a discipline other than education for all executive positions, and this cadre grows slightly (to 11.0%) when preferences are expressed with respect to the Vice-President for Instruction. Nevertheless, nearly half the CEOs give equal preference to all three types of doctorates—Ed.D. in higher education, Ph.D. in higher education, and Ph.D. in another discipline—for all five positions listed in Table H-14. Another 40% to 45% prefer that the doctorate be in higher education—and about 60% of these have no preference between a Ph.D. and an Ed.D.

Looking again at Table H-15, the bottom chart compares the preferences of persons who hold Ph.D.s with those of persons who hold Ed.D.s. The data shows:

- For both CEOs with Ph.D.s and those who hold Ed.D.s, about 40% to 50% of the respondents equate all three types of doctorates as equal, showing no preference for one over the other.
- Within Ph.D.s, there is one group (about 17% of the CEOs who hold Ph.D.s) who prefer a Ph.D. in a discipline other than education for all positions; there is a second group (consisting of 15.4% of the CEOs with Ph.D.s) who prefer a Ph.D. in higher education for Chancellors and Presidents; and there is a third group (7.9%) who prefer a Ph.D. in higher education for Vice-Presidents for Instruction and Student Services.
- Within Ed.D.s, a group of from 14.3% to 19.1%, depending on the position under discussion, prefer that the incumbents have Ed.D.s in higher education.

The findings presented in this section can be summarized as follows:

1. About 10% of the CEOs prefer the Ed.D. in Higher Education for all positions.
2. Zero percent to nine percent (depending on the position) prefer the Ph.D. in Higher Education.
3. Seven percent to 11 percent (depending on the position) prefer the Ph.D. in a discipline other than education.
4. About 25% prefer a doctorate in education, but have no preference between the Ed.D. and Ph.D.
5. About 45% of the CEOs indicate no preference for type or discipline of the doctorate.

Here are some representative comments from the CEOs on their preferences:

Prefer Ph.D. in Higher Education: (1) "Research function is important to understand as a CEO. Ph.D. usually has a more focused area of research/study than an Ed.D." (2) "More rigor required including research ability in a Ph.D. And it should be in Higher Education because it seems to prepare for administration—leadership is not necessarily taught in a discipline." (3) "Prestige is the only reason" for Ph.D. rather than Ed.D.

Prefer Ed.D. in Higher Education: (1) "Ed.D is preferable because it tends to be application-based for administrative practitioners." (2) "The Ed.D. provides a more comprehensive approach to the entire discipline." (3) "Unique qualities of educational leadership need to be addressed." (4) "The Ed.D is much less theoretical and involves "real live fire" analysis and pedagogy. Ph.D. is a bit too esoteric (most)."

Prefer Ph.D. in a discipline other than education: (1) We should be applying research and critical thinking skills to the practice of higher education. A Ph.D. is a research degree." (2) "I think the Ph.D. and Ed.D in Higher Education are too general and disciplines demand more rigor." (3) For the VP for Instruction, the Ph.D. "should be awarded in an academic, vocational, or technical area so that he or she will have the appropriate knowledge for administering these programs."

Symbolic Value and Accreditation. Related to the discussion just completed are questions we asked the CEOs about the symbolic value of the doctorate and the need for accreditation of the institution from which one gets a doctorate.

As one can discern from the findings presented in Table H-16, fully 42.2% of the CEOs responded that the symbolic value of the doctorate is "far more" or "somewhat more" important than the actual training received. And 79.8% said that the symbolic value is of equal or greater value than the training. Only 20.2% said that the training is of greater value. These responses do not necessarily mean that the training is of low quality, but they do call to question the efficacy or relevance of the training with respect to the requirements of the job.

More than 80% of CEOs who do not have a doctorate think the symbolic value is "far more" or "somewhat more" important than the training, as shown in Table H-17. This is not surprising, but that only 22% of those who hold a doctorate responded that the value of the training exceeds the symbolic value is unexpected.

Ph.D.s are less likely than Ed.D.s to think that the symbolic value exceeds the training value. CEOs with Ph.D.s most often think the training and symbolic values are equal (see Table H-17).

Finally, CEOs were asked how important is it, for advancement in community college administration, that a doctorate be from a regionally accredited institution rather than from a non-accredited one. About 85% felt that it was "extremely" or "very" important that the degree be from an accredited IHE. Women were slightly more likely than men to say that it was "extremely" important (see Table H-17). Apparently, accreditation enhances the symbolic value, and it may enhance the value of the training. Only two CEOs responded that accreditation was "not important" and that the training value exceeds the symbolic value.

Perceptions of Supply and Demand, Availability of Training, and Alternatives to a Doctoral Program

Perceptions of Supply and Demand. The majority of Community college CEOs think that the demand for CC administrators with "an appropriate doctorate" exceeds the supply of such persons. Table H-18 shows that 51.4% think that demand "greatly exceeds" or "exceeds" supply, while only 14.0% think supply "greatly exceeds" or "exceeds" demand. Very few (only 2.8%) of the CEOs hold the view that supply "greatly exceeds" demand. About one-third indicated that supply and demand are "in balance."

Analysis reveals that CEOs with more administrative experience tend to see a greater imbalance in supply and demand than CEOs with less experience—the imbalance being in the

direction of demand exceeding supply. We can extract from Table H-19 the pertinent summary information as follows:

Table H-20

Perception of Supply and Demand for Doctorates in CC Administration by Years of Experience as a CC Administrator

<u>Years of Experience As a CC Administrator</u>	<u>Number of CEOs</u>	<u>Percentage Who Responded That:</u>	
		<u>Supply and Demand are in Balance</u>	<u>Demand "Greatly Exceeds" or "Exceeds" Supply</u>
Less than 13	19	42.1	36.9
13 to 18	23	39.1	47.8
19 to 21	22	31.8	50.0
22 to 27	22	22.7	59.1
More than 27	21	19.0	61.9

The survey does not reveal why this pattern exists. Perhaps experience leads to greater appreciation of the doctorate.

Availability of Training. CEOs were asked whether there is a doctoral program in CC administration/leadership within "reasonable commuting distance" of their campus (or district in the case of Chancellors). Three out of five said there is not (see Table H-21).

The CEOs were also queried whether the campuses of CSU, UC, independent IHEs, and non-accredited private IHEs that are closest to their campuses offered training in CC administration/leadership and, if they did, how they rate the quality of that training.

Only 13 of the 105 respondents said they could obtain CC administration training at the closest CSU campus, and 70% rated the training "good" or "very good" while 30% rated it "poor" or "fair." Fourteen percent did not know whether the nearest CSU offered such training.

Thirty-three of the CEOs answered that training could be obtained from the nearest UC campus, and 44 said that it could be found on the campus of the nearest independent accredited IHE. But still, 55.2% said that the UC did not offer such training, and an additional 13.3% said they did not know whether UC did. Similarly, about 20% did not know whether the nearest independent IHE offered training in community college administration. The great majority of the UC and Independent IHE programs were rated highly in terms of quality, with 21% of the CEOs giving the independent colleges a rating of "outstanding," and 15% giving the highest rating to UC programs.

Alternatives to Doctoral Programs. The CEOs were asked whether other forms of professional education could further the development of community college leaders as effectively as a formal doctoral program. Clearly, this question is related to one's views of the desirability of the doctorate and of the skills and qualities that such programs impart to their graduates.

Overall, more than half (56.4%) of the CEOs think that there is no good substitute for a doctoral program. But that fact that more than 40% think other forms of training can be as effective is interesting—but not surprising in light of views of the importance of the symbolic value versus the training and the disagreement over what type of doctorate is most appropriate.

As shown in Table H-22, several subgroups of CEOs have a view that is different from that of the overall majority. The key observations are:

- As would be expected, CEOs who do not have a doctorate are much more likely than degree holders to find value in alternative forms of training—two-thirds of them responded YES, while 61% of those with a doctorate responded NO.
- Those with the least administrative experience and those with the fewest years since receiving the doctorate (presumably, the younger CEOs) are more likely to see value in alternative forms of training.
- Seven of eight African Americans who hold a doctorate responded positively to the suggestion that other types of training could be an effective substitute for a doctoral program.

CEOs who responded affirmatively to the question of alternative training were asked to describe alternatives and to explain their reasons. Some representative comments were:

- "Certificate programs in specific skill sets: program management, budgeting, and so on."
- "MBA, MPA, law degree."
- "Sound leadership programs such as the Harvard program would be acceptable."
- Alternative forms of training "For VP and below only."
- "There is no substitute for experience, especially when it is combined with leadership management training."
- "Internships—what the job is really about. I am ABD and none of my classes prepared me for this position."
- "In-service training for administrators is much needed, and more important than doctoral education is the need for training of entry-level business, student service, and instructional leaders."
- "If there were an "MBA" in educational administration or personnel it would help train people for VP of Business or Director or Vice-Chancellor of Personnel which are in short supply and have no career track."
- "A comprehensive set of intensive workshops/institutes focused on key CC issues—learning paradigm, leadership strategies, business partnerships, instructional technology, etc."
- "Academies in key functional areas."

- "MBA or JD is preferable to Ph.D. The need is not for Ph.D. or Ed.D. The need is for expertise in labor issues, fund raising, management, research, legislative advocacy, fiscal, redevelopment, land use, facilities, strategic planning, and critical thinking. Time spent attaining a doctorate could be better spent gaining experience in an actual leadership environment. We need a terminal degree plus continuing education in all leadership areas of management, including legal, fiscal, and information technology."

And on alternative training and the symbolic value of the doctorate, there were these comments:

- "Yes, but symbolic value would be lost. Even Harvard program for senior managers still does not have the status of Ph.D."
- "Only if there is a value ascribed to the training that equals the doctorate. I don't foresee that happening so other forms of training will be supplemental at best."

Inventory of Doctorates in Community College Administrative Positions

In the questionnaire, CEOs were asked to complete an "Inventory of Administrative Positions." They were asked to list all of the administrators who hold a doctorate, the type of degree, and the discipline. They were also asked to list the administrative positions in which the current incumbents do not hold a doctorate. As a result of the open-ended nature of the question, the results cannot be viewed as a precise inventory. Some CEOs, it appears, were most eager to list every administrator with a doctorate, but were less detailed regarding those positions in which the incumbent does not hold a doctorate. In a few cases, the CEO simply wrote "all deans" without giving any number. As a consequence, the number of deans and directors who have a doctorate is probably overestimated. In addition, often the person who completed the inventory did not know the discipline, the specialization within Education, or the type of doctorate (Ph.D., Ed.D., or other). These omissions resulted in the groupings that can be seen in Table H-23. There are also classification problems stemming from different names for the same function, and from office holders carrying out multiple functions. Finally, the Table concerns campus administrative positions only; administrators in the Chancellor's Offices are not included.

If one were to expect that administrators of colleges would have doctorates—particularly in order to supervise direct-service personnel who frequently have doctorates (i.e., professors, counselors, and so forth)—one would be surprised by the California community colleges. It appears that the majority do not hold the highest degree. Even in the key positions of Chief Instructional Officer (CIO) and Chief Student Services Officer (CSSO), more than forty percent of the incumbents lack the terminal degree.

Other highlights of Table H-23 can be summarized as follows:

- More than half of the CIOs have a Ph.D., but the distribution between Ph.D.s in education and other disciplines is not clear because of the data problems (it's probably about 50:50).
- About two-thirds of the CSSOs who hold a doctorate have an Ed.D.
- The bulk of the Chief of Administrative Officers (71.8%) have no doctorate.

- About half the Other Vice-Presidents (such as Executive Vice-President, Vice President for Human Resources, Vice-President for Information Technology, and Vice-President for Development) hold a doctorate and half do not.

Table H-1

Number and Type of Doctorates By Administrative Position
Chancellors, Superintendents, and Presidents

<u>Position</u>	<u>Number in Position</u>	<u>With Doctorate</u>		<u>Type of Doctorate</u>					
		<u>Number</u>	<u>Percentage</u>	<u>Ph.D.</u>	<u>Ed.D.</u>	<u>Other</u>	<u>#</u>	<u>Pct.</u>	<u>#</u>
Chancellors	18	15	83.3%	9	60.0%	6	40.0%	0	0.0%
Superintendents/Presidents	91	76	83.5%	30	39.5%	43	56.6%	3	3.9%
Total	109	91	83.5%	39	42.9%	49	53.8%	3	3.3%

CPEC ccc docs by ethnicity and gender by level/sheet2

Table H-2

Institutions From Which CEOs Received Their Doctorates

	Frequency	Percent
University of Southern California	13	14.29
NOVA Southeastern University	6	6.59
UCLA	6	6.59
University of Texas at Austin	5	5.49
UC Berkeley	4	4.40
University of La Verne	4	4.40
University of San Francisco	4	4.40
Claremont Graduate School	3	3.30
Pepperdine University	3	3.30
Stanford	2	2.20
UC Riverside	2	2.20
University of Illinois	2	2.20
University of Massachusetts	2	2.20
University of Michigan	2	2.20
University of the Pacific	2	2.20
U.S. International University at San Diego	2	2.20
Arizona State University	1	1.10
Boston College	1	1.10
Brigham Young University	1	1.10
California Professional School of Psych. Studies	1	1.10
Florida Atlantic University	1	1.10
Hastings College of Law	1	1.10
Kent State University	1	1.10
Louisiana State	1	1.10
Michigan State University	1	1.10
Northern Illinois University	1	1.10
Oklahoma State University	1	1.10
Pennsylvania State University	1	1.10
SUNY Stony Brook	1	1.10
Teachers College Columbia University	1	1.10
Texas Women's University	1	1.10
The Wright Institute, Berkeley?	1	1.10
University of Albany, New York	1	1.10
University of Chicago	1	1.10
University of Cincinnati	1	1.10
University of Colorado	1	1.10
University of Kansas	1	1.10
University of Oklahoma	1	1.10
University of Pittsburgh	1	1.10
University of San Diego	1	1.10
University of San Francisco and Lincoln University	1	1.10
U of M ?	1	1.10
University of Minnesota	1	1.10
University of Nevada Reno	1	1.10
University of Notre Dame	1	1.10
Total	91	100.00

CPEC ccc Table 10-2/sheet1

Table H-3

**Specializations of Doctorates by Type of Doctorate and Gender
Chancellors, Superintendents, and Presidents**

Specializations of Persons with Ph.D.sSpecializations of Persons with Ed.D.s

<u>Administration</u>	Women	Men	Total	<u>Administration</u>	Women	Men	Total
Higher Education Administration	3	2	5	Higher Education Administration	3	2	5
Higher Ed. Admin/CC Leadership	1	0	1	Higher & Postsecondary Ed. Admin.	0	1	1
Higher Education Policy Analysis	1	0	1	Higher Education Community Colleges	2	4	6
Higher Education Administration	0	2	2	Higher Education/Legal Issues	0	1	1
Community Colleges	0	1	1	Higher Education	2	3	5
Education Administration	2	2	4	CC Administration	1	3	4
Education Leadership	0	1	1	CC Administration & Instruction	0	1	1
Administration	1	0	1	Education Leadership	3	3	6
Management & Human Behavior	1	0	1	Education Administration	1	3	4
				Education Management	1	0	1
SubTotal	9	8	17	Organization Leadership	1	1	2
				Organization and Leadership	1	0	1
<u>Other Fields</u>				Leadership	0	1	1
American Urban History	0	1	1	Institutional Management	0	1	1
Biology	0	1	1	Administration	0	1	1
Chemistry	0	1	1				
Clinical Rehabilitation Psychology	0	1	1	Subtotal	15	25	40
Communication	1	0	1				
Counseling	1	1	2	<u>Other Fields</u>			
Classics	1	0	1	Adult & Continuing Education	1	0	1
English	1	1	2	Counseling	1	0	1
History	0	1	1				

Linguistics	0	1	1	Counseling & Personnel Services	0	1	1
Political Science	0	2	2	Curriculum	0	1	1
Psychology	1	4	5	Curriculum & Instruction	1	0	1
Secondary Education	0	1	1	Education	0	1	1
Speech & Hearing Science	1	0	1	Linguistics	1	0	1
U. S. History	0	1	1	Plant Physiology	0	1	1
				Psychology	1	0	1
Subtotal	6	16	22	Subtotal	5	4	9
Total	15	24	39	Total	20	29	49
<u>Other Doctorates</u>							
Juris Doctorate	1	0	1				
Doctorate of Public Administration	0	1	1				
Doctorate of Arts	0	1	1				

CPEC ccc docs by specialization/sheet1

Table H-4

Number and Percentage of CEO Doctorates by Ethnicity, Gender, and Administrative Position

Ethnicity	Chancellors					
	Women		Men		All Chancellors	
	Number of Chancellors	Percent with Doctorate	Number of Chancellors	Percent with Doctorate	Number of Chancellors	Percent with Doctorate
African American	0		2	100.0	2	100.0
Asian/Asian-American	0		1	0.0	1	0.0
American Indian	0		1	100.0	1	100.0
Filipino	0		0		0	
Hispanic/Latino/Chicano	0		4	75.0	4	75.0
White (non-Hispanic)	3	100.0	7	85.7	10	90.0
Other	0		0		0	
Total	3	100.0	15	80.0	18	83.3

Ethnicity	Presidents/Superintendents						Chancellors, Presidents & Superintendents	
	Women		Men		All Presidents/Superintendents		Percent with Doctorate	
	Number of Pres/Supt.	Percent with Doctorate	Number of Pres/Supt.	Percent with Doctorate	Number of Pres/Supt.	Percent with Doctorate		
African American	4	100.0	4	75.0	8	87.5	10	90.0
Asian/Asian-American	2	100.0	4	100.0	6	100.0	7	85.7
American Indian	0		2	100.0	2	100.0	3	100.0
Filipino	0		1	0.0	1	0	1	0.0
Hispanic/Latino/Chicano	7	71.4	11	90.9	18	83.3	22	81.8
White (non-Hispanic)	24	91.7	31	77.4	55	83.6	65	84.6
Other	0		1	0.0	1	0	1	0.0
Total	37	89.2	54	79.6	91	83.5	109	83.5

Table H-5

**Years since receiving doctorate By Type of Doctorate
Chancellors, Superintendents, and Presidents**

		Type of Doctorate	
		<u>Ph.D.</u>	<u>Ed.D.</u>
Years since receiving doctorate: 10 years or less	Count	2	14
	% within Years since receiving doctorate (5 groups)	12.5	87.5
	% within Type of Doctorate	5.1	28.6
	% of Total	2.2	15.4
11 to 15 years	Count	10	9
	% within Years since receiving doctorate (5 groups)	50.0	45.0
	% within Type of Doctorate	25.6	18.4
	% of Total	11.0	9.9
16 to 20 years	Count	9	6
	% within Years since receiving doctorate (5 groups)	56.3	37.5
	% within Type of Doctorate	23.1	12.2
	% of Total	9.9	6.6
21 to 25 years	Count	8	13
	% within Years since receiving doctorate (5 groups)	36.4	59.1
	% within Type of Doctorate	20.5	26.5
	% of Total	8.8	14.3
26 or more years	Count	10	7
	% within Years since receiving doctorate (5 groups)	58.8	41.2
	% within Type of Doctorate	25.6	14.3
	% of Total	11.0	7.7

Total	Count	39	49
	% within Years since receiving doctorate (5 groups)	42.9	53.8
	% within Type of Doctorate	100.0	100.0
	% of Total	42.9	53.8

CPEC ccc age and type of doctorate/sheet2

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Table H-6

Timeline characteristics of CEO Doctorates

Group	Number	Years Since Received Doctorate		Years From Baccalaureate To Doctorate		Years in Doctoral Program		Years While Earning Doctorate as					
		Mean	Median	Mean	Median	Mean	Median	Full-time Student		Teacher or Counselor		Education Administrator	
All Doctorates	91	17.9	18.0	15.4	15.0	4.6	4.0	1.2	0.5	1.0	0.0	2.4	1.0
Chancellors	15	20.3	22.0	13.5	12.0	4.9	4.0	1.5	0.4	0.9	0.0	2.1	0.0
Superintendents/Presidents	76	17.5	17.0	15.8	15.0	4.6	4.0	1.1	0.5	1.1	0.0	2.4	1.3
All Ph.D.s	39	20.0	19.0	13.2	12.0	4.7	4.0	2.1	2.0	1.0	0.0	1.6	0.0
Female Ph.D.s	15	17.9	17.0	16.0	17.0	4.6	4.0	1.8	1.5	0.5	0.0	2.4	0.0
Male Ph.D.s	24	21.4	22.0	11.5	11.5	4.8	4.0	2.4	3.0	1.3	0.0	1.2	0.0
All Ed.D.s	49	16.3	17.0	17.0	17.0	4.6	4.0	0.4	0.0	1.1	0.0	2.9	3.0
Female Ed.D.s	20	16.0	15.5	17.2	18.0	4.1	4.0	0.5	0.0	0.7	0.0	2.5	3.0
Male Ed.D.s	29	16.5	18.0	17.0	16.5	5.0	4.0	0.4	0.0	1.4	0.0	3.2	3.5
All Doctorates													
African Americans	9	14.3	15.0	19.8	20.0	7.4	7.0	1.4	1.5	0.8	0.0	5.8	5.3
Asian/Asian American	6	16.2	15.5	16.3	15.5	4.7	4.3	1.6	0.8	0.8	0.0	2.4	2.0
American Indian	3	27.5	27.5	11.7	12.0	5.0	5.0	2.9	1.5	2.1	1.3	0.4	0.0
Hispanic/Latino/Chicano	18	16.8	17.5	14.5	12.5	4.4	4.0	1.2	1.0	1.1	0.0	2.0	0.0
White (non-Hispanic)	55	18.8	19.5	15.1	14.5	4.2	4.0	1.0	0.0	1.0	0.0	2.0	1.0

CPEC ccc timeline characteristics/sheet2

Table H-7

Education Administration Experience of Community College CEOs

	Number	Years as							
		CC		4-year College		K-12		Other Ed. Institution	
		<u>Administrator</u>		<u>Administrator</u>		<u>Administrator</u>		<u>Administrator</u>	
		<u>Mean</u>	<u>Median</u>	<u>Mean</u>	<u>Median</u>	<u>Mean</u>	<u>Median</u>	<u>Mean</u>	<u>Median</u>
All Persons without Doctorates	18	22.9	25.0	0.4	0.0	0.8	0.0	0.0	0.0
All Persons with Doctorates	91	19.8	20.0	1.52	0.0	1.0	0.0	0.5	0.0
Chancellors	18	20.7	19.5	3.2	0.0	0.3	0.0	0.2	0.0
Superintendents/Presidents	91	20.3	20.0	1.0	0.0	1.1	0.0	0.5	0.0
All Ph.D.s	39	18.9	19.0	1.9	0.0	1.3	0.0	0.7	0.0
Female Ph.D.s	15	17.1	16.0	2.3	0.0	1.3	0.0	0.9	0.0
Male Ph.D.s	24	20.0	19.5	1.6	0.0	1.2	0.0	0.6	0.0
All Ed.D.s	49	20.8	20.0	1.1	0.0	0.9	0.0	0.4	0.0
Female Ed.D.s	20	19.9	20.0	0.9	0.0	0.3	0.0	0.6	0.0
Male Ed.D.s	29	21.4	23.0	1.3	0.0	1.3	0.0	0.2	0.0
With A Doctorate									
African Americans	9	20.4	21.0	3.8	0.0	0.7	0.0	0.0	0.0
Asian/Asian American	6	14.8	15.5	1.9	0.0	2.2	0.0	1.7	0.0
American Indian	3	31.0	38.0	0.0	0.0	0.0	0.0	0.0	0.0
Hispanic/Latino/Chicano	18	17.4	16.5	1.0	0.0	2.2	0.0	0.7	0.0
White (non-Hispanic)	55	20.5	20.0	1.4	0.0	0.6	0.0	0.4	0.0

CPEC ccc timeline characteristics/sheet 1

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Table G-8

CEO Holders of Doctorate's Reasons for Pursuing the Doctorate

How important was each of the following reasons for pursuing your doctorate?	N	Percentage of Respondents					Mean	Standard Deviation
		Not Important At All <u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	Very Important <u>5</u>		
Job advancement and promotion	91	4.4	2.2	6.6	22.0	64.8	4.41	1.02
Intellectual growth	91	0.0	0.0	8.8	29.7	61.5	4.53	0.66
Organizational and leadership skills	91	3.3	4.4	15.4	29.7	47.3	4.13	1.05
Career field change	91	39.6	14.3	13.2	14.3	18.7	2.58	1.57
Salary increase	91	12.1	15.4	26.4	25.3	20.9	3.27	1.29
Societal or community expectations	91	15.4	7.7	27.5	20.9	28.6	3.4	1.38
Personal satisfaction	91	2.2	3.3	12.1	24.2	58.2	4.33	0.97
Need for college teaching	1					100.0		
It was a challenge	1					100.0		
Women need doctorate	1					100.0		
Analytical and writing skills	1					100.0		

CPEC ccc reasons for getting doctorate/sheet1

Table H-9

How Important was possession of the doctorate in securing your present position?

Group	Number of Respondents	Percentage of Responses					No Doctorate When Appointed
		Essential	Very Helpful	Somewhat Helpful	Minimally Helpful	Not a Factor	
All Doctorates	91	65.9	25.3	6.6	-	-	2.2
All Ph.D.s	39	61.5	28.2	7.7	-	-	2.6
All Ed.D.s	49	69.4	24.5	4.1	-	-	2.0
Other Doctorates	3	66.7	-	33.3	-	-	-
Females	36	61.1	27.8	5.6	-	-	5.6
Males	55	69.1	23.6	7.3	-	-	-
African Americans	9	22.2	55.6	-	-	-	22.2
Females	4	-	50.0	-	-	-	50.0
Males	5	40.0	60.0	-	-	-	-
Asian/Asian American	6	50.0	16.7	33.3	-	-	-
Females	2	50.0	-	50.0	-	-	-
Males	4	50.0	25.0	25.0	-	-	-
American Indian	3	66.7	33.1	-	-	-	-
Females	0	na	na	na	na	na	na
Males	3	66.7	33.1	-	-	-	-
Hispanic/Latino/Chicano	18	61.1	27.8	11.1	-	-	-
Females	5	80.0	-	20.0	-	-	-

Males	13	53.8	38.5	7.7	-	-	-
White (non-Hispanic)	55	76.4	20.0	3.6	-	-	-
Females	25	68.0	32.0	-	-	-	-
Males	30	83.3	10.0	6.7	-	-	-

Table H-10

As preparation for your current responsibilities, your doctoral program was:

		<u>Percentage of Responses</u>				
		<u>Essential</u>	<u>Very Helpful</u>	<u>Somewhat Helpful</u>	<u>Minimally Helpful</u>	<u>Not Helpful At All</u>
All Doctorates	91	31.9	42.9	20.0	4.4	-
All Ph.D.s	39	28.2	46.2	17.9	7.7	-
All Ed.D.s	49	34.7	38.8	24.5	2.0	-
Other Doctorates	3	33.3	66.7	-	-	-
Females	36	30.6	38.9	27.8	2.8	-
Males	55	32.7	45.5	16.4	5.5	-
African Americans	9	22.2	33.3	33.3	11.1	-
Females	4	-	25.0	50.0	25.0	-
Males	5	40.0	40.0	20.0	-	-
Asian/Asian American	6	50.0	33.3	-	16.7	-
Females	2	100.0	-	-	-	-
Males	4	25.0	50.0	-	25.0	-
American Indian	3	-	33.3	66.7	-	-
Females	0	na	na	na	na	na
Males	3	-	33.3	66.7	-	-
Hispanic/Latino/Chicano	18	33.3	50.0	16.7	-	-
Females	5	20.0	40.0	40.0	-	-

Males	13	38.5	53.8	7.7	-	-
White (non-Hispanic)	55	32.7	43.6	20.0	3.6	-
Females	25	32.0	44.0	24.0	-	-
Males	30	33.3	43.3	16.7	6.7	-

CPEC ccc need for doctorate/sheet1

Table H-11

Characteristics of Superintendents/Presidents Enrolled or Planning to Enroll in a Doctoral Program

<u>Degree Objective</u>		<u>Gender</u>	
Ph.D.	2	Female	1
Ed.D.	3	Male	4
<u>Doctorate Specialization</u>		<u>Ethnicity</u>	
Higher Ed. Administration	1	African American	1
Higher Education	1	Filipino	1
Education Policy Anlaysis	1	Hispanic/Latino/IChicano	1
Organizational Leadership	1	White (non-Hispanic)	2
Missing	1		
<u>Years as CC Administrator</u>		<u>Position</u>	
11 years	1	Superintendent/President	5
19 years	1	Chancellor	0
20 years	1		
25 years	1		
27 years	1		

CPEC ccc need for doctorate/sheet3

Table H-12

Reasons for Pursuing a Doctorate of Superintendents/Presidents who do not hold a Doctorate

How important was each of the following reasons for pursuing your doctorate?	N	Number of Respondents				Mean	Mean for CEOs who Possess a Doctorate
		Not Important At All	1	2	3	4	
Job advancement and promotion	4	0	1	0	1	2	4.0
Intellectual growth	5	0	0	1	0	4	4.5
Organizational and leadership skills	5	0	0	0	0	3	4.1
Career field change	4	4	0	0	0	0	1.0
Salary increase	4	2	1	1	0	0	1.8
Societal or community expectations	5	0	0	1	1	3	4.4
Personal satisfaction	5	0	0	0	1	4	4.8

CPEC ccc need for doctorate/sheet2

Table 10-13

Characteristics of Community College Leaders Who Are Not Planning to Pursue a Doctorate

Position		
Superintendent/President	10	
Chancellor	3	
Years as CC Administrator		
Less than 10	1	
10 to 19	2	
20 to 25	4	
26 to 30	4	
More than 30	2	
Gender		
Female	3	
Male	10	
Ethnicity		
African American	0	
Asian/Asian American	1	
Hispanic/Latino/Chicano	3	
White (non-Hispanic)	8	
Other	1	

		Number of Respondents					
		Not Important At All				Very Important	
How important was each of the following reasons for not pursuing your doctoral	N	1	2	3	4	5	Mean
Felt no need for doctorate	12	4	1	3	3	1	2.7
No programs offered in reasonable proximity	12	5	1	3	1	2	2.5
Family obligations interfere	12	3	1	4	3	1	2.8
Cannot afford the time	12	1	1	4	3	3	3.5
Cannot afford the costs	12	3	2	4	2	1	2.7
Possess 2 masters degrees	1					1	5.0
Will retire soon	3					3	5.0

CPEC doc. need for doctorate sheet2

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Percentage of Respondents

Position	Is Position Holder Expected to Hold a Doctorate in Your District? Pct. YES	Across the State, Should Position Holder Be Expected to Have a Doctorate? Pct. YES	Preferred Type of Doctorate for Position				
			(1) Ed.D. in Higher Education	(2) Ph.D. in Higher Education	(3) (1) & (2) Equally Preferable	(4)	
						Ph.D. in a Discipline Other Than Education	(1), (2), & (4) Equally Preferable
District Chancellor	88.0	93.6	10.4	9.4	25.5	7.5	46.2
Campus President	79.4	85.3	11.5	8.7	25.0	7.7	46.2
VP/Dean, Instruction	50.0	70.1	10.0	5.0	26.0	11.0	48.0
VP/Dean, Student Services	32.1	55.1	10.4	4.2	26.1	9.4	47.9
Deans of Occupational/Vocational Ed.	5.6	8.6	13.2	0.0	22.4	7.9	56.6

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Table H-15
Doctoral Preferences by Selected Subgroups of Respondents

Percentage of Respondents Who Think Position Holder Should
Be Expected to Hold a Doctorate

Respondent Group	Number	VP/Dean for:				
		Chancellor	President	Instruction	Student Services	Occ./Voc. Edc.
Have Doctorate	91	96.7	94.5	79.8	61.8	10.3
Do Not Have Doctorate	18	77.8	38.9	22.2	22.2	0.0
Ph.D.s	39	97.4	97.4	86.8	73.7	16.2
Ed.D.s	49	95.9	91.8	72.9	56.3	6.4
Years since receiving doctorate						
10 years or less	16	100.0	93.8	87.5	56.3	18.8
11 to 15 years	20	100.0	95.0	75.0	50.0	5.0
16 to 20 years	15	93.8	93.8	68.8	56.3	0.0
21 to 25 years	22	95.5	95.5	75.0	55.0	0.0
26 or more years	16	94.1	94.1	94.1	94.1	29.4

Preferred Type of Doctorate by Ph.D.s and Ed.D.s for Selected Positions
Percentage of Respondents Preferring Each Type of Doctorate

Position/Doctorate of Respondent	(4)				
	(1) Ed.D. in Higher Education	(2) Ph.D. in Higher Education	(3) (1) & (2) Equally Preferable	Ph.D. in a Discipline Other Than Education	(5) (1), (2), & (4) Equally Preferable
Chancellor					
Ph.D.s	0.0	15.4	20.4	17.9	43.6
Ed.D.s	18.8	2.1	33.3	2.1	43.8
Campus President					
Ph.D.s	0.0	15.4	20.5	17.9	43.6
Ed.D.s	19.1	2.1	29.8	2.1	46.8
VP/Dean Instruction					
Ph.D.s	0.0	7.9	31.6	18.4	42.1
Ed.D.s	14.9	2.1	27.7	6.4	48.9
VP/Dean Student Services					
Ph.D.s	0.0	7.9	34.2	15.8	42.1
Ed.D.s	14.3	0.0	31.0	4.8	50.0
Dean Occup./Voc. Educ.					
Ph.D.s	3.3	0.0	23.3	16.7	56.7
Ed.D.s	18.8	0.0	28.1	0.0	53.1

CPEC ccc expectations/sheet3

Table H-16

How important is symbolic value of doctorate versus training received?

	<u>Frequency</u>	<u>Percent</u>
Symbolic value far more important than training	25	22.9
Symbolic value somewhat more important than training	21	19.3
Symbolic value equal in importance to training	41	37.6
Symbolic value somewhat less important than training	9	8.3
Symbolic value far less important than the training	13	11.9
Total	109	100.0

How important for advancement in CC administration is it that a doctorate be from a regionally accredited institution?

	<u>Frequency</u>	<u>Percent</u>
Extremely important	74	68.5
Very important	19	17.6
Somewhat important	7	6.5
Minimally important	3	2.8
Not important	5	4.6
Total	108	100.0

CPEC ccc symbolic and accreditation/sheet1

Table H-17

Gender By How important for advancement in CC administration is it that a doctorate be from a regionally accredited institution?

<u>Gender</u>		<u>Extremely Important</u>	<u>Very Important</u>	<u>Somewhat Important</u>	<u>Minimally Important</u>	<u>Not Important</u>
Female	Count	31	7			1
	% within Gender	79.5	17.9			2.6
Male	Count	43	12	7	3	4
	% within Gender	62.3	17.4	10.1	4.3	5.8

Do you have an earned doctorate? By How important is symbolic value of doctorate versus training received?

Symbolic Value Compared to Training

<u>Do you have an earned doctorate?</u>		<u>Far More Important</u>	<u>Somewhat More Important</u>	<u>Equal In Importance</u>	<u>Somewhat Less Important</u>	<u>Far Less Important</u>
YES	Count	17	14	40	7	13
	% within Do you have an earned doctorate?	18.7	15.4	44.0	7.7	14.3
NO	Count	8	7	1	2	0
	% within Do you have an earned doctorate?	44.4	38.9	5.6	11.1	0.0

Type of Doctorate By How important is symbolic value of doctorate versus training received?

Symbolic Value Compared to Training

<u>Type of Doctorate</u>		<u>Far More Important</u>	<u>Somewhat More Important</u>	<u>Equal In Importance</u>	<u>Somewhat Less Important</u>	<u>Far Less Important</u>
Ph.D.	Count	4	3	24	2	6
	% within Type of Doctorate	10.3	7.7	61.5	5.1	15.4
Ed.D.	Count	12	11	14	5	7
	% within Type of Doctorate	24.5	22.4	28.6	10.2	14.3

CPEC ccc symbolic and accreditation/sheet2

Table H-18

**Assessment by Community College Leaders
of the Current Job Market in Community College Administration for
Holders of An Appropriate Doctorate**

	<u>Frequency</u>	<u>Percent</u>
Supply greatly exceeds demand	3	2.8
Supply exceeds demand	12	11.2
Supply and demand are in balance	33	30.8
Demand exceeds supply	40	37.4
Demand greatly exceeds supply	15	14.0
Don't Know	4	3.7
Total	107	100.0

CPEC ccc supply and demand/sheet1

Table H-19

Years as a Community College Administrator By Perception of Supply and Demand for Doctorates in CC Administration

		Supply Greatly <u>Exceeds Demand</u>	Supply Exceeds <u>Demand</u>	Supply and Demand <u>In Balance</u>	Demand Exceeds <u>Supply</u>	Demand Greatly <u>Exceeds Supply</u>	<u>Don't</u> <u>Know</u>
<u>Years as CC Administrator</u>							
Less than 13 years	Count	1	3	8	3	4	0
	% within Years as a CC Administrator	5.3	15.8	42.1	15.8	21.1	0.0
13 to 18 years	Count	1	1	9	7	4	1
	% within Years as a CC Administrator	4.3	4.3	39.1	30.4	17.4	4.3
19 to 21 years	Count	0	2	7	10	1	2
	% within Years as a CC Administrator	0.0	9.1	31.8	45.5	4.5	9.1
22 to 27 years	Count	0	4	5	11	2	0
	% within Years as a CC Administrator	0.0	18.2	22.7	50.0	9.1	0.0
More than 27 years	Count	1	2	4	9	4	1
	% within Years as a CC Administrator	4.8	9.5	19.0	42.9	19.0	4.8

CPEC ccc supply and demand/sheet2

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Table H-21

Availability of CC Administration/leadership Training and Perceptions of Quality of Training

Availability Question	DO NOT				# of Respondents Answering	Respondent Rating of Quality of CC Program Number of Respondents					
	N	YES	NO	KNOW	YES	Poor	Fair	Good	Very Good	Out- standing	Don't Know or Missing
Is there a CC administration doctoral program in reasonable commuting distance?	107	34.6	62.6	2.8	37						
Does the CSU campus that is closest offer training in CC Administration/leadership?	105	12.4	73.3	14.3	13	1	2	2	5	0	3
Does the UC campus that is closest offer training in CC Administration/leadership?	105	31.4	55.2	13.3	33	2	2	7	12	4	6
Does the independent IHE campus that is closest offer training in CC Administration/leadership?	107	41.4	38.3	20.6	44	0	5	6	15	7	11
Does the non-accredited private IHE that is closest offer training in CC Administration/leadership?	96	6.3	36.5	57.3	6	0	0	2	0	0	4

CPEC ccc training/sheet2

Table H-22

Assessment of Alternatives to Doctoral Training By Selected Characteristics

Survey Question: Could other forms of continuing professional education further the development of community college leaders as effectively as a formal doctoral program?

Respondent Group	N	Percentage		
		YES	NO	Other
All Respondents	101	41.6	56.4	2.0
Chancellors	16	50.0	50.0	0.0
Superintendents/Presidents	85	40.0	57.6	2.4
<u>Years as CC Administrator</u>				
Less than 13	18	50.0	50.0	0.0
13 to 18	22	40.9	59.1	0.0
19 to 21	23	43.5	56.5	0.0
22 to 27	19	36.8	63.2	0.0
More than 27	19	36.8	52.6	10.3
<u>Have an Earned Doctorate?</u>				
YES	86	37.2	60.5	2.4
NO	15	66.7	33.3	0.0
<u>Type of Doctorate</u>				
Ph.D.	36	38.9	58.3	2.8
Ed.D.	47	36.2	61.7	2.1
<u>Years since Receiving Doctorate</u>				
10 years or less	16	56.3	43.8	0.0
11 to 15	19	26.3	73.7	0.0
16 to 20	15	33.3	66.7	0.0
21 to 25	21	42.9	52.4	4.8
26 or more	15	26.7	66.7	6.7
<u>Ethnicity</u>				
African American	9	88.9	11.1	0.0
Have Doctorate	8	87.5	12.5	0.0
No Doctorate	1	100.0	0.0	0.0
Asian/Asian American	7	28.6	71.4	0.0

Have Doctorate	6	16.7	83.3	0.0
No Doctorate	1	100.0	0.0	0.0
American Indian	3	33.3	33.3	33.3
Have Doctorate	3	33.3	33.3	33.3
No Doctorate	0	na	na	na
Hispanic/Latino/Chicano	21	47.6	52.4	0.0
Have Doctorate	18	44.4	55.6	0.0
No Doctorate	3	66.7	33.3	0.0
White (non-Hispanic)	60	33.3	65.0	1.7
Have Doctorate	51	29.4	68.6	2.0
No Doctorate	9	55.6	44.4	0.0
<u>Gender</u>				
Female	38	42.1	57.9	0.0
Male	63	41.3	55.6	3.2

CPEC ccc training/sheet1

Table H-23

Inventory of Doctorates in Community College Campus Administrative Positions

	Chief Instruction/ Academic Affairs Officer		Chief Student Services Officer		Chief Administrative Officer		All Others Identified As Vice-Presidents		All Others Identified As Deans & Directors		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
No Doctorate	34	43.6%	40	54.1%	28	71.8%	25	53.2%	385	62.2%	512	59.7%
Unknown Type of Doctorate	1	1.3%	1	1.4%	0	0.0%	0	0.0%	39	6.3%	41	4.8%
<u>Ph.D.s</u>												
Ph.D. in Unknown Specialization	7	9.0%	1	1.4%	3	7.7%	2	4.3%	26	4.2%	39	4.6%
Ph.D. In Education Specialization	7	9.0%	4	5.4%	1	2.6%	9	19.1%	34	5.5%	55	6.4%
Ph.D. In Non-education Discipline	10	12.8%	5	6.8%	1	2.6%	2	4.3%	59	9.5%	77	9.0%
Total Ph.D.s	24	30.8%	10	13.5%	5	12.8%	13	27.7%	119	19.2%	171	20.0%
<u>Ed.Ds</u>												
Ed.D. in Unknown Specialization	6	7.7%	2	2.7%	0	0.0%	0	0.0%	21	3.4%	29	3.4%
Ed.D. in Education (unknown subfield)	5	6.4%	7	9.5%	0	0.0%	2	4.3%	19	3.1%	33	3.9%
Ed.D. in Administration-related field (Higher Education, Ed. Policy, Ed. Admin., CC Ed. Leadership, Organization & Leadership)	6	7.7%	10	13.5%	4	10.3%	3	6.4%	23	3.7%	46	5.4%
Ed.D. in Other Specializations (Reading, Psychology, Special Ed., Student												

Services, Curr. & Instr., Art Ed., Counseling, Library)	2	2.6%	3	4.1%	0	0.0%	1	2.1%	7	1.1%	13	1.5%
Total Ed.D.s	19	24.4%	22	29.7%	4	10.3%	6	12.8%	70	11.3%	121	14.1%
Doctor of Pharmacy	0	0.0%	1	1.4%	0	0.0%	0	0.0%	0	0.0%	1	0.1%
Doctorate in Public Administration	0	0.0%	0	0.0%	1	2.6%	0	0.0%	0	0.0%	1	0.1%
Juris Doctorate	0	0.0%	0	0.0%	1	2.6%	3	6.4%	3	0.5%	7	0.8%
Doctor Of Nursing Science	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	0.2%	1	0.1%
Doctor of Business Administration	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	0.2%	1	0.1%
Doctor of Veterinary Medicine	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	0.2%	1	0.1%
Total Doctorates	44	56.4%	34	45.9%	11	28.2%	22	46.8%	234	37.8%	345	40.3%
Total in Position	78	100.0%	74	100.0%	39	100.0%	47	100.0%	619	100.0%	857	100.0%

CPEC ccc supply and demand/sheet3

Appendix I

The Production of Education Doctorates in California

This chapter examines the production of education doctorates by institutions of higher education in California.

The Survey

A questionnaire was sent to the lead person (usually identified as a "dean") of the education units (which have various names but are most often known as a "School of Education") of public and independent institutions of higher education (IHEs) operating in California. (The questionnaire is Appendix ____.). The response rates were as follows:

Table I-1

Response Rate to the Survey of Deans of Schools of Education

<u>Type of Institution</u>	<u>Number of Institutions Sent a Questionnaire</u>	<u>Number of Completed Questionnaires Returned</u>
University of California	8	8
Independent Accredited IHEs	39	31
Independent Approved IHEs	6	3
Total	53	42

Overview of Doctoral Programs in Education in California

All of the major producers of doctorates in education in California returned the survey. Three categories of respondents can be identified:

Table I-2

IHEs and the Education Doctorate

<u>Type of Institution</u>	<u>Number of Institutions</u>
• Does not award a doctorate in education and has no plans to do so	13
• Does not award a doctorate in education but has plans to award the degree in the future	11
• Currently is awarding doctorates in education	18
Total	42

The programs that offer the education doctorate in California award the following types of degrees:

Table I-3

Types of Doctorates Awarded

<u>Type of Doctorate</u>	<u>Number of IHEs</u>
Ed.D. only	9
Ph.D. Only	3
Ed.D. and Ph.D.	6

Profile of Education Doctoral Programs, 1998-1999 and 1999-2000

[This section is not complete because USC is revising its statistics and Pepperdine has said they will return the questionnaire but has not done so yet.]

This section describes the supply of education doctorates produced by California institutions in 1998-99 and 1999-2000. Table I-4 displays the total number of doctorates and the numbers of Ph.D.s and Ed.D.s produced by California IHEs. To estimate the supply of doctorates willing to work in the public schools, the production numbers must be (1) reduced by the number of doctorates who are in California on temporary visas and who will work in a foreign location, (2) be reduced by the number of doctorates who intend to work in organizations other than K-12 districts, and (3) be increased by the number of doctorates who have earned their degree in another State and are returning to California to work in the public schools. These calculations are the subject of Appendix K.

In addition, doctorate production—which in fact has been quite stable over a long period of time but has been increasing in the past couple of years—must be adjusted to reflect planned program expansion and the creation of new programs. These considerations are addressed in later sections of this chapter.

Tables I-5 and I-6 provide detailed information on the production of doctorates by specialization, type of degree (Ph.D. or Ed.D.) and institution.

Table I-7 displays the number of applications, the number of students admitted, the number of admitted students who enrolled, and the total enrollment in education doctoral programs by institution for 1998-99 and 1999-2000. It appears that the institutions increased the percentage of applicants who were admitted in 1999-2000 (49%) compared to 1998-1999 (43%). This has resulted in increased enrollment in education doctoral programs because the percentage of persons admitted who enrolled did not change between the two years (about 76% in both years).

Table I-8 displays the distribution of enrollment among doctoral specializations. There has been substantial growth in enrollment between the two years in the field of Special Education. Curriculum & Instruction has also increased. Overall growth in enrollments in Education Administration/Leadership was offset by a significant reported decline in the enrollment in this field at the University of La Verne [need to call them and check this out.]

Capacity and Expansion Plans

The deans were asked about the feasibility, without additions to the faculty, of expanding existing programs to accommodate more students. The following responses were received:

- Ten deans indicated they could expand the Educational Administration/Leadership program without adding faculty; nine deans said they could expand programs in other areas.
- Seven institutions said they could expand Educational Administration/Leadership by a total of about 110 students—an average of 15-16 per institution. One IHE said it could grow by 100 students; and another indicated it could grow by 60 students within existing resources.
- In other specializations, the total feasible growth across all IHES within existing resources was reported as: Special Education Administration (10); Curriculum & Instruction (32); Educational Psychology (4); Technology & Learning (8); Higher Education (85); Human Development (5); Child & Youth Studies (100); English as a Second Language (8); and Non-Profit Organizations (15).

The survey also addressed the question of whether IHEs had “definite plans for the next several years to increase the capacity (by adding faculty or other means)” of their institution to enroll doctoral students. The responses were as follows:

- Eleven deans answered there were plans underway to expand capacity.

- In Educational Administration/Leadership, six deans reported plans to expand enrollment capacity by 130 students—an average of 21 to 22 per IHE. One dean indicated his institution was planning to expand to accommodate 150 additional students in Administration/Leadership.
- Capacity expansion plans in other specific specializations were as follows: Counseling (10 students); School Psychology (10); Teaching Fields (19); Special Education (10); English as a Second Language (12); Curriculum & Instruction (30); Instructional Leadership (10); Urban Schooling (12); and Other unspecified (30).

Students Specializing in Community College Administration

Information was sought in the survey concerning programs in community college administration. The deans reported as follows:

- Eleven (of seventeen) IHEs indicated they had students currently enrolled who were specializing in community college administration; six said they had none. Forty-six of the CC administration specialists are seeking an Ed.D. and 21 are pursuing a Ph.D. Three of the IHEs which said they had students specializing in CC administration did not report the number.
- Eleven institutions reported awarding doctorates to students specializing in community college administration during the last five years. They indicated they awarded 40 Ed.D.s and 22 Ph.D.s in that specialization during the period (with one IHE not reporting the number). One IHE said it awarded 30 Ed.D.s during the last five years to students who had minors in CC administration or higher education.

IHEs Considering Initiating Doctoral Programs in Education

All of the deans of schools of education who reported they currently do not offer doctoral programs in education were asked whether they have plans to award the doctorate in the future. Eleven responded they have such plans and these are shown in Table I-9. (Concordia University indicated they have plans, but gave no information about these plans, so it is not included in Table I-9).

Five the programs shown in the Table would specialize in Education Leadership (one additional one might have this specialization), and two others described their prospective programs as focusing on leadership in urban areas. One program will address "Issues of Diversity in Learning and Teaching."

Except for Saint Mary's College of California, the plans to initiate doctoral programs contemplate a starting date two to five years in the future. Thus, the first doctorates awarded would not be until several years later, in 2005 to 2008.

In sum, a significant number of IHEs that are currently not offering a doctorate in education are seriously considering entering this field. If their plans are realized, in 2009 to 2010 some fifty to sixty additional education doctorates will be produced annually--mostly in education leadership--contributing a not insignificant increase in the annual supply of education doctorates.

Most Important Goals of Doctoral Programs in Education Administration/Leadership

Public school superintendents and CSU deans of schools of education were asked to identify the five most important skills, abilities, areas of knowledge, and experiences that a doctoral program in Education Administration/Leadership should provide its participants. The deans of schools of education which produce education doctorates were asked, on the other hand, to identify the five most important skills, abilities, areas of knowledge, and experiences that their programs in Education Administration/Leadership are designed to impart to their students.. In a later chapter we will compare the responses of the three groups. Here the responses of the deans are examined.

Respondents were given a list of skills, abilities, areas of knowledge, and experiences (culled from the literature and from a focus group of superintendents), and were asked to select the five most important imparted in their doctoral programs.. (Space was provided at the bottom of the list for the addition of items that were not included on the list.). The deans responses are shown in Table I-10.

The clear central objective of doctoral programs in Education Administration/Leadership as depicted by the deans is leadership training augmented by instruction in organizational theory and communication skills. Application of theory is sought through completion of a dissertation addressing a practical problem or clinical practice involving field-based problem solving.

The capacity to provide leadership in an organization characterized by diversity was rated the top objective of doctoral programs in Education Administration/Leadership. This key goal and the overall leadership theme is shared by all types of institutions, no matter whether they offer only Ed.D.s, only Ph.D.s, or both Ed.D.s and Ph.D.s.

Interesting findings shown in Table I-11 include the following:

- Not one of the deans rated "knowledge of school finance and related research" among the top five objectives of their programs.
- None of the deans in an IHE that offers only the Ed.D. rated "knowledge of instructional methods and related research" among their top five.
- Broad and theoretically-oriented topics were rarely listed as top priorities, including "Broad perspective on education in history and society," "Broad theoretical knowledge in the social sciences," "Knowledge of the ethical dimensions of schooling," and "Completion of a discipline-based dissertation."
- Completion of a dissertation addressing a practical problem was mentioned by half the respondents, and particularly by deans of schools offering only the Ed.D.

- Self-confidence (which was strongly emphasized by superintendents in a focus group) was not given as a priority by any of the deans, but one added that "courage" was a product of his doctoral program.

As was done with the superintendents (see Appendix G) and the CSU deans (see Appendix J), a cluster analysis was conducted to see if the deans could be divided into subgroups that have clear cut differences in their goals. This analysis did not reveal easily distinguishable subgroups, but several of the deans described programs that were unique compared to the large majority.

Deans' Views of the Need for More Persons Who Hold a Doctorate in the Positions of Superintendent and Principal

Deans of schools of education that award doctorates in education were asked whether, on a scale from 1 to 5, California public schools need more persons possessing a doctorate in the positions of superintendent and principal. Table I-11 shows that the deans strongly indicate a need for more doctorates in the superintendency, and appear only a little less convinced that we need more principals who hold a doctorate.

- Slightly more than two out of five deans (41.2%) indicated there is a "very great need for more" superintendents who hold a doctorate. 76.5% of the deans rated the need a "4" or a "5," while only 5.9% gave a rating of "2," and none said there is "no need for more."
- With respect to principals, 64.7% of the deans rated the need for more who hold a doctorate as a "4" or a "5," but 29.4% rated the need as only a "1" or a "2," including 17.8% who indicated there is "no need for more" principals who possess a doctorate.

One of the objectives of this study has been to get a handle on the attributes that doctoral programs instill in those who earn that degree—the "value added" by the doctorate which school district employers might want to pay extra for. The deans who said that the state needs more doctorates in the positions of superintendent and principal were asked to explain why.

The responses were vaguer than hoped for and more descriptive of what doctoral programs should do than what they actually accomplish. The recurrent themes are:

- High-quality programs are needed. The implication is that there are too many low-quality programs.
- Knowledge of teaching and learning is needed. But in the ranking of priority objectives of doctoral programs in Education Administration/Leadership (see Table I-10), "Knowledge of instructional methods and related research" was not among the highest ranked.
- The ability to analyze data and relate research to practice is needed.

- Leadership skills applied to improve instruction.

The deans' explanations of why we need more doctorates in the positions of superintendent and principal are interesting and quoted in full as follows ("S" identifies comments about the superintendent; "P" refers to comments about the principal):

- S/P—"Key decision-makers need to act based on knowledge in education."
- S/P—"We need Ed.D. programs that put much emphasis on problems of practice for both superintendents and principals. There must be an emphasis on instruction/learning tied with analysis so that educational administrators not only know about learning theory but they also understand research data."
- S—"We need leadership which addresses new reforms and theories/research in teaching and learning."
- S/P--Ed.D. with emphasis on leadership, organizational change, budget and finance, learning/instruction/assessment, diversity. These positions require as much knowledge and skill (and commitment) as possible. To the extent that the degree program is excellent, the degree will help increase quality of school and district leadership."
- S—"Ph.D.—instructional leadership."
- S—"Needs to play role as educational CEO. Breath of demands requires management, social sciences, and humanities."
- S/P—"Administrators and other school leaders need to (1) use theory and research consistently as an essential component in decision-making; (2) understand teaching and learning in depth; (3) view organizational structures and cultures as mechanisms through which to lead; and (4) direct and interpret program evaluation and action research. For these purposes an Ed.D. is appropriate, with emphasis on administration, curriculum & instruction, school psychology, technology, staff development, and perhaps other areas."
- S—"Site-based instruction, technology planning, assessment."
- P—"Site-based instruction, technology enhanced instruction, assessment."
- S—"An Ed.D. in organizational or educational leadership, providing it has a balance of theory and practice opens the doors for statewide school success and community collaboration."
- S/P—"Both superintendents and principals need (a) better analytical skills, (b) knowledge of the issues and policies affecting schools; and (c) better leadership skills. The issue is less whether they receive a Ph.D. or an Ed.D. and more whether they attend a high quality program."

- S/P—"Capacity to provide informed educational leadership. Need programs of high quality."

Deans' Views of the Need for More Persons in the Public Schools Holding Doctorates in Selected Specializations

Deans were asked to rate the importance of increasing employment in the public schools of persons with a doctorate in selected specializations. Table I-12 displays the results of this inquiry. The key findings are:

- The top three specializations are Educational Administration/Leadership, Curriculum & Instruction, and Educational Psychology (research and evaluation). These three had no ratings of "not important." All of the other specializations had one or more ratings of "not important."
- The next set of specializations receiving about the same level of support are: School Psychology, Special Education, and Teaching Fields.
- Specializations with the least need for more practitioners holding a doctorate are, according to the deans, Counseling and Guidance (but a couple of deans indicated that it was "extremely important" to increase doctorates in this field), Adult & Continuing Education, and Social/Philosophical Foundations of Education.

The deans were asked, for those specialization in which you think we need more doctorates, why do we need more? The responses tended to be very general, focusing on the broad need for advanced training:

- "Shortage of teachers [in IHEs] for Special Education. Curriculum & Instruction specialization needs to have a technology and minority language focus."
- "Teachers and other school leaders need to understand the organizational and systemic needs that school districts have. Leadership = skills, attitudes, and beliefs. These become critical to moving people and groups towards change."
- "Institutional leadership and educational leadership at the district and site level require advanced study and knowledge for the improvement of California's schools."
- "Credential programs tend to focus on the practical. Leaders need both a broader perspective and deeper insights into educational psychology, curriculum development, and assessment in relation to diverse students and communities."
- "Fields that place special demands on administrators are areas of particular need (Ed. Admin, C& I, research and evaluation)."
- "Districts are responsible for the support and assessment of beginning teachers and with the proposed 2-level credential they will be responsible for most all of level II

instruction. There will be a need for a whole new class of teacher educators with professional knowledge of instructional leadership and discipline-based practice."

- "Better knowledge and skill will contribute to better education."
- "We need individuals who can bridge theory, research, policy and practice in issues in schooling sites." (?)
- "The jobs of specialized directors, principals, and superintendent require highly sophisticated skills and knowledge."
- "Deeper, more sophisticated knowledge of subjects/issues that affect schools and children."
- "Doctorates needed for faculty at CSU."
- "Ed. Admin. because of the increasing complexity of leadership positions."

Table I-4

**Education Doctorates Produced By California Institutions
1997-98 to 1999-2000**

<u>Institution</u>	<u>1997-98</u>	<u>1998-99</u>	<u>1999-00</u>	<u>1998-1999</u>		<u>1999-2000</u>	
				<u>Ed.D.</u>	<u>Ph.D.</u>	<u>Ed.D.</u>	<u>Ph.D.</u>
University of Southern California	104	71	73				
UCLA	64	82	63	28	54	21	42
University of San Francisco	53	61	83	61	0	83	0
University of La Verne	40	60	60	60	0	60	0
Pepperdine	32	32	32				
Stanford	28	39	20	0	39	0	20
UC Berkeley	20	22	35	2	20	2	33
UC Santa Barbara	20	20	25	0	20	0	25
UC Davis	17	11	11	7	4	5	6
Claremont Graduate School	15	31	35	0	31	0	35
University of San Diego	14	13	11	13	0	11	0
UC Riverside	12	9	15	0	9	0	15
University of the Pacific	9	13	9	13	0	9	0
U.S. International University	4	4	4	4	0	4	0
UC San Diego	9	2	2	0	2	0	2
Azusa Pacific University	3	5	6	5	0	6	0
Biola University	2						
Fielding Institute	2						

UC Santa Cruz	2						
California Institute of Technology	1						
California School of Prof. Psychology--LA	1						
California School of Prof. Psychology--SD	1						
Graduate Theological Union	1						
UC Irvine	1	5	3	5	0	3	0
La Sierra University	1						
School of Theology of Claremont	1						
Mills College	0	0	0	0	0	0	0
Nova Southeastern University	unk.	12	7	12	0	7	0
	457	492	494	210	179	211	178

- Notes: (1) Stanford: Summer 2000 doctorates not included in 1999-2000.
 (2) Davis: Still clearing, may be some additional doctorates in 1999-2000.
 (3) UC Santa Cruz: 1997-98 as reported by Survey of Earned Doctorates;
 Dean reported no doctoral program in education; starts 2002-03.
 (4) Pepperdine did not respond to the survey. Doctorates in 1998-99 and 1999-00
 Are assumed to be same as 1997-98

CPEC CA institutions and number of doctorates/sheet1

Table I-5

**Number of Doctorates Awarded By Specialization, Type of Doctorate, and Institution
1998-1999 and 1999-2000**

Traditional Fields

<u>Institution</u>	<u>Education Administration Leadership</u>				<u>Curriculum & Instruction</u>				<u>Teaching Fields</u>				<u>Counseling & Guidance</u>			
	<u>1998-99</u>		<u>1999-00</u>		<u>1998-99</u>		<u>1999-00</u>		<u>1998-99</u>		<u>1999-00</u>		<u>1998-99</u>		<u>1999-00</u>	
	<u>Ed.D.</u>	<u>Ph.D.</u>	<u>Ed.D.</u>	<u>Ph.D.</u>	<u>Ed.D.</u>	<u>Ph.D.</u>	<u>Ed.D.</u>	<u>Ph.D.</u>	<u>Ed.D.</u>	<u>Ph.D.</u>	<u>Ed.D.</u>	<u>Ph.D.</u>	<u>Ed.D.</u>	<u>Ph.D.</u>	<u>Ed.D.</u>	<u>Ph.D.</u>
University of Southern California																
UCLA	25	0	17	0	3	16	2	7								
University of San Francisco	15	0	24	0	11	0	10	0					4	0	7	0
University of La Verne	60	0	60	0												
Pepperdine																
Stanford					0	7	0	2					0	6	0	2
UC Berkeley	1	0	1	0												
UC Santa Barbara	0	4	0	3												
UC Davis	7	0	5	0	0	3	0	4								
Claremont Graduate School	0	1	0	3	0	9	0	10								
University of San Diego	13	0	11	0												
UC Riverside	0	0	0	6	0	3	0	2								
University of the Pacific	6	0	6	0	7	0	3	0								
UC Irvine	5	0	3	0												
U.S. International University	3	0	1	0												
UC San Diego									0	2	0	2				
Azusa Pacific University	5	0	6	0												
Nova Southeastern University	1	0	3	0					2	0	1	0				

Total	141	5	137	12	21	38	15	25	2	2	1	2	4	6	7	2
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Notes: (1) UC San Diego teaching field is math/science education.

(2) Nova Southeastern teaching field is health education.

Institution	Education Psychology				Social/Phil. Foundations				Special Education				Higher Education			
	1998-99		1999-00		1998-99		1999-00		1998-99		1999-00		1998-99		1999-00	
	Ed.D.	Ph.D.	Ed.D.	Ph.D.	Ed.D.	Ph.D.	Ed.D.	Ph.D.	Ed.D.	Ph.D.	Ed.D.	Ph.D.	Ed.D.	Ph.D.	Ed.D.	Ph.D.
University of Southern California																
UCLA	0	18	1	16	0	3	0	10	0	2	0	0	0	11	1	8
University of San Francisco																
University of La Verne																
Pepperdine																
Stanford	0	5	0	2	0	4	0	2								
UC Berkeley	0	1	0	2	0	4	0	6	0	1	0	1	1	0	1	3
UC Santa Barbara	0	9	0	9					0	0	0	3				
UC Davis					0	1	0	2								
Claremont Graduate School													0	12	0	1
University of San Diego																
UC Riverside	0	1	0	1					0	2	0	3				
University of the Pacific																
UC Irvine																
U.S. International University																
UC San Diego																
Azusa Pacific University																
Nova Southeastern University													7	0	3	0
Total	0	34	1	30	0	12	0	20	0	5	0	7	8	23	5	12

Table I-5 (continued)

Traditional Fields

<u>Institution</u>	<u>School Psychology</u>				<u>Other</u>				<u>Adult & Continuing Education</u>			
	1998-99		1999-00		1998-99		1999-00		1998-99		1999-00	
	<u>Ed.D.</u>	<u>Ph.D.</u>	<u>Ed.D.</u>	<u>Ph.D.</u>	<u>Ed.D.</u>	<u>Ph.D.</u>	<u>Ed.D.</u>	<u>Ph.D.</u>	<u>Ed.D.</u>	<u>Ph.D.</u>	<u>Ed.D.</u>	<u>Ph.D.</u>
University of Southern California												
UCLA												
University of San Francisco												
University of La Verne												
Pepperdine												
Stanford					0	9	0	7				
UC Berkeley	0	3	0	4								
UC Santa Barbara	0	1	0	3	0	1	0	1				
UC Davis												
Claremont Graduate School					0	9	0	17				
University of San Diego												
UC Riverside	0	3	0	3								
University of the Pacific												
UC Irvine												
U.S. International University												
UC San Diego												
Azusa Pacific University												
Nova Southeastern University									2	0	0	0
Total	0	7	0	10	0	19	0	25	2	0	0	0

Table I-6

**Number of Doctorates Awarded By Specialization, Type of Doctorate, and Institution
1998-1999 and 1999-2000**

Special Fields

<u>Institution</u>	<u>Technology & Learning</u>				<u>English as Second Language</u>				<u>International & Multicultural Ed.</u>				<u>Private School Administration</u>			
	<u>1998-99</u>		<u>1999-00</u>		<u>1998-99</u>		<u>1999-00</u>		<u>1998-99</u>		<u>1999-00</u>		<u>1998-99</u>		<u>1999-00</u>	
	<u>Ed.D.</u>	<u>Ph.D.</u>	<u>Ed.D.</u>	<u>Ph.D.</u>	<u>Ed.D.</u>	<u>Ph.D.</u>	<u>Ed.D.</u>	<u>Ph.D.</u>	<u>Ed.D.</u>	<u>Ph.D.</u>	<u>Ed.D.</u>	<u>Ph.D.</u>	<u>Ed.D.</u>	<u>Ph.D.</u>	<u>Ed.D.</u>	<u>Ph.D.</u>
UCLA																
University of San Francisco									25	0	38	0	6	0	4	0
Stanford																
UC Berkeley																
UC Santa Barbara																
U.S. International University	0	0	1	0	1	0	2	0								
Total	0	0	1	0	1	0	2	0	25	0	38	0	6	0	4	0

	<u>Social Research Methodology</u>				<u>Language & Literacy</u>				<u>Education Policy</u>				<u>Prog. Eval./Quant. Methods</u>			
	<u>1998-99</u>		<u>1999-00</u>		<u>1998-99</u>		<u>1999-00</u>		<u>1998-99</u>		<u>1999-00</u>		<u>1998-99</u>		<u>1999-00</u>	
	<u>Ed.D.</u>	<u>Ph.D.</u>	<u>Ed.D.</u>	<u>Ph.D.</u>	<u>Ed.D.</u>	<u>Ph.D.</u>	<u>Ed.D.</u>	<u>Ph.D.</u>	<u>Ed.D.</u>	<u>Ph.D.</u>	<u>Ed.D.</u>	<u>Ph.D.</u>	<u>Ed.D.</u>	<u>Ph.D.</u>	<u>Ed.D.</u>	<u>Ph.D.</u>
UCLA	0	4	0	1												
University of San Francisco																
Stanford																
UC Berkeley					0	4	0	7	0	2	0	8	0	0	0	1

UC Santa Barbara
U.S. International University

Total	0	4	0	1	0	4	0	7	0	2	0	8	0	0	0	1
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<u>Math/Science/Technology</u>				<u>Counsel./Psych./Clinical</u>				<u>Administration/Policy Analysis</u>			
1998-99		1999-00		1998-99		1999-00		1998-99		1999-00	
<u>Ed.D.</u>	<u>Ph.D.</u>	<u>Ed.D.</u>	<u>Ph.D.</u>	<u>Ed.D.</u>	<u>Ph.D.</u>	<u>Ed.D.</u>	<u>Ph.D.</u>	<u>Ed.D.</u>	<u>Ph.D.</u>	<u>Ed.D.</u>	<u>Ph.D.</u>

UCLA
University of San Francisco
Stanford
UC Berkeley
UC Santa Barbara
U.S. International University

									0	8	0	5
0	5	0	1	0	5	0	6					
Total	0	5	0	1	0	5	0	6	0	8	0	5

CPEC CA institutions and number of doctorates/sheet2

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Table I-7

Education Doctoral Program Applications, Admissions, Acceptances, and Enrollment

1998-99 and 1999-2000

Institution	Number of Applications Received To Enter Doctoral Programs		Number of Students Admitted To Doctoral Programs		Number of Students Admitted Who Enrolled		Total Enrollment in Doctoral Programs	
	1998-99	1999-00	1998-99	1999-00	1998-99	1999-00	1998-99	1999-00
University of Southern California	94	109	61	66	50	35	655	646
UCLA	230	246	104	110	72	73	362	358
University of San Francisco	140	112	92	72	76	42	369	370
University of La Verne	100	120	50	100	45	110	185	109
Pepperdine								
Stanford								
UC Berkeley	321	290	76	66	47	46	260	265
UC Santa Barbara	287	258	58	84	32	46	191	203
UC Davis	64	73	27	24	27	23	120	122
Claremont Graduate School	101	113	73	71	52	60	227	239
University of San Diego	46	43	24	23	21	22	140	145
UC Riverside	35	78	22	44	15	26	75	91
University of the Pacific	45		40	27	39	26	160	174
UC Irvine	51	32	21	13	18	13	29	60
U.S. International University	25	18	14	12	10	11	43	48
UC San Diego	7	7	3	3	3	3	12	12
Azusa Pacific University	14	36	11	30	11	29	56	83
Nova Southeastern University							88	86
Mills College	0	19	0	12	0	11	0	30
	1560	1554	676	757	518	576	2972	3041

Note: USC data for applications, admissions, and acceptances are for the Ed. Admin./Leadership program only.

CPEC CA institutions and number of doctorates/sheet4

Table I-8

**Distribution of Enrollment Among Doctoral Specializations
1998-1999 and 1999-2000**

<u>Specialization</u>	<u>1998-1999</u>		<u>1999-2000</u>	
	<u>Count</u>	<u>Percentage</u>	<u>Count</u>	<u>Percentage</u>
Education Administration/Leadership	1180	48.3%	1196	47.9%
Curriculum & Instruction	189	7.7%	212	8.5%
Educational Psychology	205	8.4%	180	7.2%
Social/Philosophical Foundations	109	4.5%	111	4.4%
International & Multicultural Ed.	117	4.8%	103	4.1%
Counseling & Guidance	103	4.2%	94	3.8%
Higher Education	83	3.4%	94	3.8%
Language & Literacy	87	3.6%	91	3.6%
School Psychology	73	3.0%	69	2.8%
Special Education	45	1.8%	63	2.5%
Coun./Psych./Clinical	54	2.2%	49	2.0%
Private School Administration	33	1.4%	40	1.6%
Other	16	0.7%	40	1.6%
Educational Policy	32	1.3%	31	1.2%
Social Research Methods	27	1.1%	24	1.0%
Teaching Fields	24	1.0%	21	0.8%
Math/Science/Technology	18	0.7%	21	0.8%
English as a Second Language	13	0.5%	15	0.6%
Prog. Eval/Quant. Methods	10	0.4%	14	0.6%
Technology & Learning	9	0.4%	12	0.5%
Adult & Continuing	8	0.3%	11	0.4%
Instructional Technology	6	0.2%	7	0.3%
	2441	100.0%	2498	100.0%
Claremont total enrollment	227		239	
University of Southern California other than Education Admin/ Leadership which is included above	329		312	
Stanford--missing				
Pepperdine--missing				
Total	2997		3049	

CPEC CA institutions and number of doctorates/sheet 6

Table I-9

Institutions Planning to Start Doctoral Programs in Education

(Institutions that currently do not offer the doctorate)

Institution	Specialization	Type of Doctorate			Enrollment	Year to Start Doctoral Program
		Ed.D.	Ph.D.	Both		
California Baptist University	Education Leadership	yes	no	no	20	2005
California Lutheran University	Education Leadership	yes	no	no	20 per year	2002
Chapman University	?	?	?	?	?	Possible in 2 to 3 years
Dominican College of San Rafael	Teacher Development or Education Leadership	yes	no	no	15	2003
Loyola Marymount University	Leadership in Urban Settings	Yes	no	no	25	2002
Point Lomas Nazarene University	Educational Leadership	yes	no	no	10	2005
Saint Mary's College of California	Education Leadership	yes	no	no	20	2000
Santa Clara University	Education Leadership	no	no	yes	25	2003
UC Santa Cruz	Issues of Diversity in Learning and Teaching	no	yes	no	6-8	2002-2003
University of Redlands	Urban Leadership	no	yes	no	12 every other year	?

CPEC deans future programs/sheet1

Table I-10

**Most Important Skills, Abilities, Knowledge, and Experiences Imparted by
Doctoral Programs in Education Administration/Leadership in California**

**Responses of Deans of Schools of Education that Offer a Doctorate in
Education Administration/Leadership**

What a Doctoral Program in Education Administration/Leadership Imparts	Percentage of Deans Answering YES (N=14)	Institutions That Offer		
		Ed.D. Only N=7	Ph.D. Only N=3	Ph.D. & Ed.D. N=4
Capacity to provide leadership in an organization characterized by diversity	92.9	100.0	100.0	75.0
Leadership skills	64.3	71.4	66.7	50.0
Completion of a dissertation addressing a practical problem	50.0	71.4	33.3	25.0
Knowledge of organizational theory and related research	42.9	42.9	0.0	75.0
Clinical practice involving field-based problem solving	42.9	28.6	66.7	50.0
Communication skills	28.6	14.3	66.7	25.0
Change-agent skills	28.6	14.3	33.3	50.0
Knowledge of instructional methods and related research	21.4	0.0	33.3	50.0
Data and statistical analysis skills	21.4	28.6	33.3	0.0
Knowledge of research methods	21.4	28.6	33.3	0.0
Knowledge of politics of education and related research	21.4	14.3	33.3	25.0
Broad theoretical knowledge in the social sciences	14.3	14.3	33.3	0.0
Professional contacts and networks	7.1	0.0	0.0	25.0
Broad perspective on education in history and society	7.1	14.3	0.0	0.0
Completion of a discipline-based dissertation	7.1	14.3	0.0	0.0
Knowledge of the ethical dimensions of schooling	7.1	14.3	0.0	0.0

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Self-confidence	0.0	0.0	0.0	0.0
Knowledge of school finance and related research	0.0	0.0	0.0	0.0

Open-ended additions

Understanding and framing of problems of practice	7.1	0.0	0.0	25.0
Knowledge of teaching and learning	7.1	0.0	0.0	25.0
Courage	7.1	0.0	33.3	0.0
Issues of equity, justice, and ethics	7.1	14.3	0.0	0.0

* Deans were asked to indicate the five most important skills, abilities, areas of knowledge, and experiences that their doctoral program in Education Administration/Leadership imparts from the list given above. Additional lines were provided for the addition of "Other" program goals at the respondent's discretion.

CPEC deans ed doc program priorities/sheet1

Table I-11

Deans' Perceptions of the Need for More Superintendents and Principals Who Hold a Doctorate

Position	Percentage of Respondents (N = 17)					Mean*	Don't Know
	No Need For More <u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	Very Great Need For More <u>5</u>		
Superintendent	0.0	5.9	11.8	35.3	41.2	4.19	5.9
Principal	17.6	11.8	0	23.5	41.2	3.63	5.9

*Difference between mean scores for superintendent and principal is not statistically significant ($p = .083$)

CPEC deans future programs/sheet2

Table I-12

**Deans' Perceptions of Importance of Increasing the Number of Persons Employed in the
Public Schools Who Hold A Doctorate in Specified Specializations**

Percentage of Respondents (N = 15)

<u>Specialization</u>	<u>Not Important</u>				<u>Extremely Important</u>	<u>Mean*</u>	<u>Don't Know</u>
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>		
Educ. Administration/Leadership	0.0	6.3	12.5	25.0	50.0	4.27	6.3
Curriculum & Instruction	0.0	6.7	20.0	33.3	40.0	4.07	0.0
Ed. Pyshc. (research and evaluation)	0.0	13.3	20.0	40.0	26.7	3.80	0.0
School Psychology	6.3	6.3	25.0	31.3	12.5	3.46	18.8
Special Education	6.7	13.3	26.7	26.7	20.0	3.43	6.7
Teaching Fields	14.3	7.1	21.4	21.4	21.4	3.33	14.3
Counseling & Guidance	13.3	6.7	20.0	20.0	13.3	3.18	26.7
Adult & Continuing Education	26.7	6.7	13.3	26.7	0.0	2.55	26.7
Social/Philosophical Foundations of Edc.	20.0	26.7	13.3	26.7	0.0	2.54	13.3

Open-Ended Additions

Urban Education

of Mentions

1

287

288

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Multicultural Education	1
Instructional Leadership	1
Language & Literacy	1
Staff Development	1
Testing & Assessment	1

*Only the difference between three pairs of means is statistically significant at $p = < .0005$: Education Administration and Adult & Continuing Ed., Curriculum & Instruction and Social/Philosophical Foundations, and Ed. Admin. and Social/Philosophical Foundations.

CPEC deans future programs/sheet3

Appendix J

The Perspective and Priorities of Deans of California State University Schools of Education

This chapter focuses on the views and priorities of deans of California State University schools of education regarding the need for more doctorates in the public schools and the types of training that should be provided in doctoral programs.

Nineteen of the twenty-one CSU deans responded to the questionnaire in time for inclusion in the analysis presented here. The survey instrument is Appendix L.

The Need for More Doctorates in the Positions of Superintendent and Principal

The deans were asked whether the public schools of California need more superintendents and principals who have a doctorate and, if they thought so, to give their reasons. Table J-1 indicates very strong support of the view that California needs more superintendents who hold a doctorate, and only slightly less strong support for more principals with a doctorate.

In asking for their reasons why school districts need more executive officers who hold a doctorate, we were attempting to understand the "value added" by doctoral programs. The responses appear a blend of what "should" be imparted in doctoral programs and what "is" imparted. Nevertheless, careful analysis of the words used by the deans, suggests that doctoral programs engender the following skills, listed in order of frequency:

- Leadership skills to lead change, reform, and instructional improvement. These skills are sophisticated and are necessary in an extremely demanding role in an environment characterized by diversity and increasing demands for accountability for student performance. They include skills in intergroup dynamics, community relations, knowledge of the politics of education, and knowledge of organizational theory.
- The ability to understand research methods and the implications of high quality research, to conduct "action research" on existing problems, and to carry out program evaluation and assessment.
- Understanding of curriculum and learning theory and of instructional methods.
- The ability to command respect and to act professionally and ethically.
- The ability to improve student academic performance.
- Problem-solving skills and financial planning skills.

The Importance of Increasing the Number of Doctorates in Education Specializations

The deans were asked how important it is to increase the number of doctorates employed in the public schools in various specializations within the field of education. As shown in Table J-2, by far the most important specialization for the deans is Education Administration/Leadership.

Curriculum & Instruction and Educational Psychology (research and evaluation) were considered "extremely important" by nearly half of the deans. The other specializations are viewed as "extremely important" by significantly fewer deans. (The tone of some of the responses on various items in the questionnaire was of an "advocacy" nature. Consequently, the relative importance to the deans of various specializations is best judged by the number of responses in the "extremely important" category.)

The deans were asked to give their reasons for selecting the specializations that they consider most important. In some instances, the deans were not specific with respect to which specialization they were commenting on, or were not detailed in their reasons. (For example, (1) "You cannot be over-educated. The current success of the schools speaks for itself." (2) "Higher expertise will produce more positive change. Too many administrative positions have fallen by default to the football coach with an M.A.—with deplorable consequences.") Many of the deans who rated the doctorate in Education Administration/Leadership as most important cross-referenced their explanation for why superintendents and principals need a doctorate in that specialization. The reasons for giving high priority to other specializations are as follows:

Adult and Continuing Education

- We have a very real need to adopt the public school curriculum to the unique needs and learning styles of adults.

Curriculum & Instruction

- There is a critical need for professional development in staff administrative positions and the teaching positions. Critical thinking and creative, innovative curriculum and teaching strategies are necessary if student performance is to improve.
- How to teach increasing numbers of students from varying demographic backgrounds is critical to our State. Curriculum and Instruction doctorates are very urgently needed.
- We need individuals who can apply theory to practice, introduce new ideas and reasons for implementation; i.e., be able to articulate the "Why" behind ideas.

Educational and School Psychology

- There is a need to increase the skills and knowledge base of these areas due to the complexity of the jobs.
- The need exists for persons who know Educational Psychology and are able to assess results based on data.

Special Education

- Producing professionals with a doctorate in Special Education will fill an immediate need in the community. Special education is changing because of new research and new public policy initiatives.
- How to teach special learners is critical to our state. Special Education doctorates are very urgently needed.

General Comments

- We need thoughtful, well-educated, ethical educational leaders who understand diversity, can evaluate programs, assess personnel, and understand teaching, learning, and development.
- In all specializations (except adult and continuing education) IHEs are competing for qualified candidates who possess an Ed.D. or Ph.D.. We are in dire need of "underrepresented" Ed.D./Ph.D. candidates in all areas.
- The education marketplace has been changing rapidly in recent years. Increased competition for students, new education delivery systems, and the expansion of information technology have created a need for stronger, more highly educated leaders and managers. Superintendents and those in upper-level management positions need to possess more sophisticated research, technical, and human relations skills to effectively lead and manage in our changing world and global economy.

Prescriptions for the Content of Doctoral Programs in Education Administration/Leadership

As noted earlier, three groups (public school superintendents, deans of doctoral programs in Education Administration/Leadership, and CSU deans of schools of education) were asked to identify the five most important skills, abilities, areas of knowledge, and experiences that a doctoral program in Education Administration/Leadership should provide the participants (in the case of deans of such doctoral programs, we asked what do their programs offer, rather than what they should offer). In a later chapter we will compare the responses of the three groups. Here we examine the responses of the CSU deans.

Deans were given a list of skills, abilities, areas of knowledge, and experiences (culled from the literature and from a focus group of superintendents), and were asked to select the five most important. (Space was provided at the bottom of the list for the addition of any items that were not included in the list.) Table J-3 summarizes the results.

Clearly the most important set of skills that doctoral programs in education administration/leadership should provide according to the deans is leadership skills. The top six are all related to motivating people and dealing with people in a diverse, political environment. (This parallels the reasons given by the deans regarding why we need more superintendents and principals who hold a doctorate—of course, in that response they are assuming that these leadership skills are actually what doctoral programs impart.)

It is interesting to note the low importance given to the dissertation. This experience has traditionally defined the doctoral experience.

Specific knowledge and skills seem most important, including data and statistical analysis skills, knowledge of instructional methods, knowledge of school finance, and the organizational skills that top the list. Interestingly, "broad perspective on education in history and society" and "broad theoretical knowledge in the social sciences" are well down the list of priorities.

A cluster analysis of the CSU deans' priorities for the goals of a doctoral program in Education Administration/Leadership revealed four groups with different emphases, as follows:

<u>Group</u>	<u># of deans</u>	<u>Skill Area</u>	<u>Number of Deans Supporting This Priority</u>
1	7	Change-agent skills	7
		Capacity to lead in environment of diversity	5
		Knowledge of instructional methods	5
2	7	Capacity to lead in environment of diversity	6
		Communication skills	6
		Leadership skills	4
		Knowledge of politics of education	4
3	4	Leadership skills	4
		Knowledge of organizational theory	4
		Capacity to lead in environment of diversity	3
		Discipline-based dissertation	2
4	1	Communication skills	1
		Clinical practice with field-based problem solving	1
		Knowledge of the ethical dimensions of schooling	1
		Knowledge of research methods	1
		Broad theoretical knowledge of the social sciences	1

The four groups of deans might be characterized as follows:

- Group 1 envisions a program in educational administration/leadership that produces instructional leaders;
- Group 2 would produce leaders with extensive practical leadership skills;
- Group 3 would produce leaders grounded in organizational theory with a discipline-based dissertation.
- The lone individual comprising Group 4 has a unique prescription.

Later, we will compare these priorities of the CSU deans with those of deans of doctoral programs and of practicing school superintendents.

Deans' Priorities for Establishing New Joint-Doctoral Programs

The deans were asked whether they would like to see the creation of new joint-doctoral programs in education involving their institution and a doctorate-granting institution.

Three deans answered "No" to this question, arguing that instead the CSUs should be authorized to award the doctorate in education. One said, for example, "I do not advocate expanding the joint-doctoral design. I recommend moving some CSUs to doctoral delivery on their own." Another dean said: "Would rather have our own—why increase something that is not working." (Two of the three deans who answered "No" are from campuses that already have joint-doctoral programs.)

Table J-4 gives the deans' priorities for establishing new joint-doctoral programs. (A CSU that already has a joint doctoral program in a specialization is excluded from the analysis of that specialization.) Not surprisingly, based on the previous sections of this chapter, the highest priority is programs in education administration/leadership.

Two inconsistencies in the deans' responses deserve mention. First, they rated Education Psychology very high in terms of the importance of increasing the number of public school employees with a doctorate in this field (see Table J-2), but it is a low priority in establishing new joint-doctoral programs. Second, the need for more employees in the public schools with a doctorate in Special Education is rated rather low (see Table J-2), but Special Education is the second top priority for new joint-doctoral programs.

Reading/Literacy and Educational Technology received multiple mentions as candidates for new programs.

Existing Joint-Doctoral Programs In Education

Table J-5 displays the existing joint-doctoral programs involving a CSU campus and a partner IHE. There are four programs in Education Leadership, two in Special Education, and one in Multicultural Education. In 1999-2000, XX doctorates were awarded by these programs. Applications to the programs that have existed at least since 1995-96 were flat at about 90 applications from 1995-96 to 1998-99, but have increased slightly in 1999-00 to 103, indicating some increase in demand in recent years as was discussed in Appendix F

Table J-1

CSU Deans' Assessment of Need for More Doctorates by Administrative Position

Percentage of Respondents (N=19)

<u>Position</u>	No Need for More				Very Great Need for More
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>
Superintendent	0.0	5.3	0.0	21.1	73.7
Principal	0.0	10.5	0.0	36.8	47.4

CPEC csu dean preferences for doc programs/sheet2

Table J-2

**Deans Assessment of How Important It Is To Increase the Number of Doctorates in the Public Schools
By Doctoral Specialization**

<u>Specialization</u>	<u>Percentage of Respondents</u>					
	Not Important <u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	Extremely Important <u>5</u>	Do Not Know
Education Administration/Leadership	0.0	0.0	0.0	11.1	88.9	0.0
Curriculum & Instruction	0.0	0.0	5.9	47.1	47.1	0.0
Educational Psychology (research and evaluation)	11.8	5.9	11.8	23.5	47.1	0.0
School Psychology	5.9	0.0	41.2	29.4	23.8	0.0
Special Education	0.0	5.9	17.6	58.8	17.6	
Teaching Fields	0.0	6.7	26.7	53.3	13.3	0.0
Counseling	0.0	5.9	47.1	35.3	11.8	
Adult & Continuing Education	18.8	12.5	56.3	6.3	6.3	0.0
Social & Philosophical Foundations of Education	11.8	23.5	23.5	29.4	5.9	5.9
<u>Additional Specializations Mentioned</u>	<u>Number of Mentions</u>					
Reading/Literacy	2					
Business Administration	1					
Communications	1					
Ethics	1					
Higher Education Administration	1					
Instructional Technology	1					
Urban Educational Leadership	1					

CPEC csu deans preferences for doc programs/sheet3

Table J-3

**Most Important Skills, Abilities, Knowledge, and Experiences That a
Doctoral Program in Education Administration/Leadership Should Provide***

	Percentage of CSU Deans Answering Yes (N = 19)
<u>What a Doctoral Program in Education Administration/Leadership Should Provide</u>	
Capacity to provide leadership in an organization characterized by diversity	73.7
Change-agent skills	57.9
Leadership skills	57.9
Knowledge of organizational theory and related research	52.8
Communication skills	42.1
Knowledge of politics of education and related research	42.1
Data and statistical analysis skills	31.6
Knowledge of instructional methods and related research	31.6
Knowledge of school finance and related research	26.3
Clinical practice involving field-based problem solving	15.8
Knowledge of the ethical dimensions of schooling	15.8
Broad perspective on education in history and society	10.5
Completion of a discipline-based dissertation	10.5
Knowledge of research methods	10.5
Broad theoretical knowledge in the social sciences	5.3
Completion of a dissertation addressing a practical problem	5.3
Self-confidence	5.3
Professional contacts and networks	0.0
<u>Open-ended additions</u>	
Problem analysis and planning	5.3
Building leadership capacity in schools and districts	5.3

* Deans were asked to indicate the five most important skills, abilities, areas of knowledge, and experiences that a doctoral program in Education Administration/Leadership should provide from the list given above.

Additional lines were provided for the addition of "Other" program goals at the respondent's discretion.

CPEC csu dean preferences for doc programs/sheet1

Table J-4

**Deans' Priorities for Establishing New Joint-Doctoral Programs
By Specialization**

<u>Specialization</u>	<u>Percentage of Respondents</u>		
	<u>Top Priority</u>	<u>Secondary Priority</u>	<u>Low or No Priority</u>
Education Administration/Leadership	93.3	0.0	6.7
Special Education	56.3	6.3	37.5
Curriculum & Instruction	47.1	11.8	41.2
Teaching Fields	29.4	17.6	52.9
Social/Philosophical Foundations of Education	17.6	17.6	64.7
Community College Administration	11.8	35.3	52.9
School Psychology	11.8	29.4	58.8
Counseling & Guidance	11.8	29.4	58.8
Higher Education	11.8	23.5	64.7
Educational Psychology	11.8	17.6	70.6
Adult & Continuing Education	5.9	29.4	64.7
<u>Other Specializations Mentioned</u>	<u>Number of Mentions</u>		
Reading/Literacy	3		
Educational Technology	2		
Assessment and Program Evaluation	1		
Mathematics Teaching Field	1		
Rehabilitation Counseling	1		
Urban Educational Leadership	1		

CPEC CSU deans priority for new joint doc programs/sheet1

Table J-5
Existing Joint-Doctoral Programs in Education

California State University	Partner Institution	Specialization	Enrollment 1999-2000	Additional Capacity (Number of Students)	Doctorates Awarded		Applications for Admission to the Program				
					1998-99	1999-00	1995-96	1996-97	1997-98	1998-99	1999-2000
Bakersfield	University of the Pacific	Educational Leadership	30	25	0	0	0	0	0	50	50
Fresno	UC Davis	Educational Leadership	30	0	3	7	34	34	37	37	40
Los Angeles	UC Los Angeles	Special Education									
Northridge	UC Riverside	Educ. Leadership/Admin.	1	12	0	0	0	0	0	13	0
San Diego	Claremont Graduate Univ.	Multicultural Education	105	10 per yr.	8	6	40	40	40	36	39
San Francisco	UC Berkeley	Special Education	17	0	2	2	12	15	18	11	24
San Jose	UC Berkeley	Urban Education Leadership									

CPEC CSU deans priority for new joint doc programs/sheet2

The ultimate goal of this study is to describe the production and utilization of education doctorates in California and to assess the need for greater production in order to improve the operation of the public schools and the community colleges. The basic public policy question is whether the State should adopt policies to foster the production of more doctorates to serve in the K-12 and community college education systems.

Clearly this study, given the resources available and the limited time-frame, can only scrape the surface of the complex issues and complicated factual questions that need to be addressed to arrive at sound conclusions. In the final analysis, what is needed is an extremely difficult study which would examine the content of doctoral programs, compare the behavior of administrators who hold and do not hold a doctorate, and assess the impact of that behavior on school operations and student learning.

Maintenance of the Education Doctorate Workforce in the Public Schools

In an analysis of supply and demand, it is customary to define demand as the number of qualified workers that employers are willing and able to hire at a point in time at the prevailing market wage.¹ Thus, current demand in the public schools for administrators who hold a doctorate is, by definition, the number of administrators who hold a doctorate who are employed in K-12 school districts.² The question addressed in this section is whether the production of education doctorates will be sufficient in the future to meet current demand; that is, to maintain the administrator doctorate workforce at its current level.³

Demand. Several factors work to deplete the doctoral workforce: principally retirements, but also departures for jobs in other fields before reaching retirement age (an age at which the person receives a monthly allowance from the State Teachers Retirement System) and deaths. Our focus is on retirements which probably account for the vast majority of doctoral departures from the K-12 workforce.

We can measure current demand in terms of absolute numbers (in 1998-99, there were about 2,184 administrators in the public schools who held a doctorate), or in terms of the percentage of all administrators in the public schools. To project the demand for doctorates based on the percentage of the administrative workforce, we must also project the number of administrators

¹ T. Bikson, et.al., The Labor Market for Attorneys in the State of California: Past, Present, and Future, The Rand Corporation, DRU-2236-UC, February, 2000.

² There are entities other than school districts that provide services for the benefit of K-12 pupils which employ persons with education doctorates. Data collection in this regard was beyond the scope of the project. It is likely that these persons are a relatively small number compared to the number employed by school districts (including county offices of education).

³ It is not known exactly in which disciplines administrators received their doctorates, but our survey of school superintendents indicates that 93.7% of those who have doctorates have them in education.

in the public schools. This will be done based on enrollment, as recommended by Gifford, et.al., in a 1986 study of the need for education doctorates.⁴

Based on data availability, we make two key assumptions in the calculation of retirements by doctorates: First, retirement rates by age are not available by educational attainment of administrators; they are, however, available by salary level. We assume, then, that the retirement rates of persons employed in the public schools who earn \$70,000 or more annually is the retirement rate of persons with education doctorates. Second, we assume that historic retirement rates by age will continue in the future—an assumption that is subject to the possibility of changes in retirement benefits in an era of state surpluses.

Age distribution data were obtained from the California Department of Education and retirement rates were obtained from the State Teachers Retirement System. Tables K-1 and K-2 display this information.

Applying the retirement rates to the age distribution, and walking the rates through the years, we estimate the number of retirements by year of administrators who hold a doctorate to be as shown in Table K-3:

Table K-3

New Doctorates Needed to Maintain the Level of Doctorates in the Public School Administrative Workforce

Year	(1) Number of Doctorates Retiring	(2) Additional Doctorates for Enrollment Growth	(3) = (1) + (2) Total New Doctorates Needed to Maintain Percentage Rate
2000-01	59	7	66
2001-02	70	24	94
2002-03	79	18	97
2003-04	90	14	104
2004-05	99	15	114
2005-06	100	13	113
2006-07	107	8	115
2007-08	111	6	117

Thus, to maintain the number of doctorates at the level existing in 1998-99 (2,184, as shown in Table D-1), new doctorates must annually enter the public school system as administrators (or, existing administrators must attain the doctorate) as estimated in column (1) of Table K-3.⁵

A simple linear equation was developed relating the number of public school administrators to total statewide enrollment and that equation was applied to the Department of Finance K-12

⁴ B. Gifford, et. al., Meeting the Need for Educational Leadership by the University of California: A Proposal for President David P. Gardner by the Deans of the Graduate Schools of Education, April, 1986.

⁵ In the 1987 study of education doctorates by CPEC, three alternative estimating procedures produced maintenance requirements of 73, 101, and 107 annually.

enrollment projections through 2007-08. The number of "growth" doctorates required each year is shown in column (2). To maintain the percentage of administrators who hold a doctorate at the same level as it was in 1998-99 (9.1%), additional administrators who hold a doctorate would have to be employed in the public schools each year as shown in column (3) of Table K-3.

Supply. Supply is the number of otherwise qualified education administrators who hold a doctorate who are willing to work for a school district employer at a point in time at the prevailing market wage. Supply can be estimated as follows:

1. It is assumed that the production of education doctorates by California institutions continues through the next eight years at the average level for 1997-98, 1998-99, and 1999-2000. This number is 490.
2. From this number we must subtract the number of persons with temporary visas who return to a foreign location upon graduation. Based on data from the Survey of earned doctorates, roughly 5% of the new doctorates have temporary visas and roughly 70% return to a foreign location. Thus $5\% \text{ of } 490 \text{ times } 75\% = 18$. And $490 \text{ minus } 18 = 472$.
3. Some persons from California earn the doctorate in other states and return to work in California. Based on information from the 1998 Survey of Earned Doctorates, of 208 persons who earned education doctorates in all other states combined and who went to high school in California, 59% planned to return to California. Thus, $59\% \text{ of } 208 = 123$. $472 + 123 = 595$.
4. It is not known how many persons who earn an education doctorate in California will leave the state.
5. Based on the record for the doctoral class of 1998 in California, approximately 28% will be employed in elementary and secondary education.⁶ It is not known how many of these will be working in private schools. At any rate, $28\% \text{ of } 595 = 167$.

One hundred sixty-seven doctorates are produced per year who are willing to work in the public schools at the prevailing wage compared to roughly 100 to 110 needed to maintain the proportion of administrators in the system with doctorates. However, not all these new doctorates will remain in California and not all will take formal leadership positions. Doctorates in School Psychology, Teaching Fields, Special Education, and Counseling & Guidance who work in public schools may not have leadership roles. Thus, we need to reduce the 167 by some unknown amount. Even if this total is reduced by 25%, it appears there would be sufficient production to maintain the level of doctorates in the system.

⁶ Table B-4 shows that 21.2% of the graduates of 1998 from California institutions had definite plans to work in K-12. However, about 30% of the new doctorates either did not indicate where they planned to work, or did not reveal any plans at all (work or postdoctoral study). These unknowns were prorated between work and study, and between the different types of employing organizations shown in Table B-4, resulting in the estimate used here of 28%.

Increased production over the next eight years has not been included in the figures given above. Mills College has thirty students enrolled in its Education Leadership program which started in 1999. Saint Mary's College of California is scheduled to begin its doctoral program in Education Leadership in 2000. More than half a dozen other independent colleges plan—and it is certainly not certain that all these plans will reach fruition—to bring new doctoral programs online in 2002 to 2005. UC Riverside is planning a new joint-doctoral program, and San Diego University and San Diego State University will soon inaugurate a new joint-doctoral program. Finally, many of the existing programs have the capacity to increase production somewhat, as described in Appendix I.

Based on the foregoing, it is concluded that California will be able to maintain over the next decade the percentage of administrators in the public schools who hold a doctorate and new State initiatives are not needed to achieve this goal.⁷

The Potential for Increased Demand for Doctorates in the Public Schools

But is demand for doctorates rising? Do school boards and superintendents want more persons who hold an education doctorate working in their schools and central offices? Do the IHEs need to produce more doctorates to meet increasing demand? The findings of this study strongly suggest that demand is not rising and, hence, there is no need to foster the production of a greater number of doctorates annually to meet rising demand. Let's examine the evidence.

The classic indicator of increasing demand for a resource is rising prices. If school district employers wanted to hire more doctorates than they already have, we would expect to see increasing wages tied to the possession of a doctorate. This study has found virtually no increases in wages for doctorates over the last five years among the public schools of California (and we expect that this stagnation has existed for a much longer period). Two-thirds of the school districts do not offer any supplemental wage for the possession of a doctorate. And those that offer a stipend provide what is clearly a nominal amount (\$1,000 per year being the mode) that is more likely an artifact of ancient salary negotiations with the teacher union than a policy directed to reward or attract doctorates, or to encourage their development internally. In short, the wage data indicate there is little competition among school districts to attract doctorates.

Perhaps there are bureaucratic and political obstacles that prevent school boards from using money to attract leaders who possess a doctorate in education. But this would not prevent a board from adopting a policy requiring that the district's Chief Executive Officer, its head of curriculum and instruction, its Deputy Superintendent with operational responsibility for all aspects of the school program, hold a doctorate. This study looked closely at the educational attainment that school boards of all sizes around the State require of newly hired administrators. It was found that of about 160 searches for school superintendents over the last four years, not one district required that the new top educational leader hold a doctorate. Obviously, then, it was no surprise to find that in no case was the head of curriculum and instruction, compensatory education, special education, school psychology, or any other central

⁷ The number of doctorates in administrative positions has remained roughly constant over the last ten years (rising from 2,122 to 2,184) while IHEs have produced about 440 doctorates per year. The stable number of doctorates employed is consistent with a retirement rate of about 100 and a rate of employment of new doctorates in the public schools of about 25%.

office function required to possess a doctorate. These findings support the view that demand for doctorates in the public schools is not rising.

Perhaps school boards value doctorates highly but do not want to limit the pool of candidates for administrative positions by requiring the doctorate. If this were the case, we might find two things: First, relatively high value would be given to the doctorate in assessing candidates and in the ultimate hiring decision. And second, programs within districts to encourage and support employees in attaining the doctorate would be established. This study examined both these possibilities, and found the following:

It was the general consensus among the people we spoke to who are knowledgeable about the hiring process in the public schools that the value of the education doctorate has declined over time relative to the value of other qualities. Change in the composition of school boards, the emergence of the "diploma mill," and the perception of lack of rigor in schools of education (a perception held by some deans as well as consumers of the degree) have contributed to the devaluation of the doctorate. Meanwhile, the shift of power over many aspects of schooling (particularly over revenues, but best illustrated by the imposition of categorical programs and state mandates) from localities to the state capitol has resulted in the need for a superintendent who can operate politically at the state level—in the capital and in statewide education associations—not necessarily an attribute engendered by producing a high-quality doctoral dissertation. The standards movement is another important influence on the qualities desired today in educational leaders. Proven success articulating, planning, and carrying-out improvements in instructional programs is now more important than any other quality. School boards also look closely at district needs in assessing administrator candidates—for example, a rapidly growing district is going to want a superintendent who can manage a complex construction program; a district with a diverse population, ethnically and linguistically, is going to look for a superintendent who can lead in such a complex environment. In sum, school boards are looking for new leaders who have demonstrated success, have broad experience, fit the needs of the district, and have good "people skills" to work effectively with the board, subordinates, and the community. A doctorate alone faces stiff competition in the public schools today.

But perhaps a good candidate with a wealth of experience who performs well on the job could be an even more effective leader and facilitator of student learning if he or she has a doctorate. If governing boards thought this, perhaps they would establish programs to support and encourage employees to acquire an Ed.D. or a Ph.D. In the random survey of superintendents we found, however, that 85% of the districts across the State have no program to foster acquisition of a doctorate. Examination of what constituted the "program" in the 15% of districts that said they had one revealed that in most cases it was the nominal doctoral stipend that was described earlier. This study concludes that programs to promote the doctorate in school districts are extremely rare (one of the most fully developed is described in Appendix F). The lack of programs to promote the doctorate is another strong indicator of a lack of increasing demand for persons who hold the degree.

Finally, waning demand for administrators who have an Ed.D. or Ph.D. is clearly illustrated by the declining percentage of public school administrators holding the degree. As discussed in Appendix D, in 1984-85 about 12.7% of administrators held a doctorate. In 1990-91 the percentage was 10.2%. In 1995-96, the percentage was 9.9%. And in the most recent year for which data is available, 1998-99, the percentage has dropped to 9.1%.

The conclusion of this study is that demand for doctorates in the public schools is not increasing. Hence, there is no reason for the State to adopt policies to promote an increase in the production of doctorates in education based on rising demand for "doctoral resources."

Should the Public Schools Have More Leaders Who Hold a Doctorate?

Perhaps demand for doctorates is weak because school board members, parents, community leaders, teachers, and pupil services personnel are simply unaware of the qualities (the knowledge, skills, and abilities) that a person with a doctorate brings to the job by virtue of attaining the highest advanced degree.

The discussion now turns to the most difficult and most important question: Should the public schools employ more leaders who hold a doctorate? This section attempts to address this issue by pulling together the findings presented in Chapters 3 through 12. But first, we must begin by examining existing research concerning the impact of doctorates on school operations and student achievement.

Evidence from Research

Unfortunately, research has little to say about the impact of administrator preparation programs on the performance of the public schools.

In an extensive review of the literature on the effectiveness of administrator preparation programs, Miklos (1992)⁸ found that the research "is fragmented, few questions are pursued in depth, and patterns in results are difficult to discern." Assessments of the effectiveness of preparation programs are usually based on reported participant satisfaction, or on surveys of practicing administrators about their opinions of the adequacy of their training.

In 1999, Shakeshaft⁹ wrote that there is "certainly no evidence that schooling and achievement, however measured, are related to anything we do in preparation programs in education administration."

McCarthy (1999)¹⁰ concluded her comprehensive review of the development of leadership preparation programs with these observations:

"A number of gaps are apparent in the information available on educational leadership units and preparation programs. Most significantly, there is insufficient research documenting the merits of program components in relation to administrator performance. Do preparation programs actually achieve their asserted purpose of producing effective leaders who create school environments that enhance student learning? . . . Adequate justification has not been provided for mandatory graduate

⁸ Miklos, E. "Administrator preparation, educational," in M. C. Aikin (Ed.), *Encyclopedia of Educational Research*, 6th edition, pp 22-29, McMillan, 1992.

⁹ Shakeshaft, Charol, "A Decade Half Full or a Decade Half Empty, Thoughts from a Tired Reformer," in Joseph Murphy and Patrick B. Forsyth (Eds.), *Education Administration in a Decade of Reform*, p. 237, Corwin Press, 1999.

¹⁰ McCarthy, Mary, "The Evolution of Educational Leadership Preparation Programs," in Joseph Murphy and Karen Seashore Louis (Eds.), *Handbook of Research on Educational Administration*, 2nd edition, p. 133, Jossey-Bass, 1999.

preparation for one to lead a public school in our nation, even though similar preparation is not required for individuals to lead other large organizations, agencies, and corporations. Data are needed to either justify the expense of such education or suggest that resources be directed elsewhere."

The lack of research linking doctoral programs to the quality of school operations and student achievement is understandable because of the extreme complexity of the subject—there are simply too many variables to control to isolate the impact of preparation programs. If research to-date is of no guidance, how else might we assess the need for more doctorates in administrative positions in the public schools of California? In the following sections this question is approached from a variety of angles.

Production of doctorates in California and the Nation

If it were the case that schools of education across the nation were expanding their production of education doctorates, and that this expansion appeared to be a secular trend, this might be an indication of widespread rising demand in the public schools for employees who hold a doctorate. In short, if the rest of nation is increasing its production of education doctorates, perhaps California should also.

This study (see Appendices A, B, and C) has found, however, that national production has declined significantly over the past twenty years (down 15%). There was a noteworthy leap upward in 1990 (a 7% increase), but since 1990 national production has been essentially flat—declining slightly less than 2% during the period from 1990 to 1998. These observations lead to the conclusion that increasing national production is not an indicator that California should increase its production.¹¹

Another national characteristic which might suggest that California increase its production of education doctorates is enrollment per doctorate produced.¹² As shown in Appendix C, K-12 enrollment per doctorate awarded is much higher in California than in the nation, and it grew significantly more in the state than in the nation during the nineties (see Figure 5-2). From 1988 to 1998, there was a 17.1% increase (an increase of more than 2,000 students) in enrollment per new doctorate in California compared to a 9.9% increase in the nation. This occurred because even though the growth of doctorates was greater in California than in the nation during the period, enrollment increased 28% in the state but "only" 16% in the nation. In 1998, there were 14,685 K-12 students for every doctorate produced in California compared to 9,438 in the nation.¹³ This finding suggests that California might want to increase its annual production of education doctorates.

¹¹ If the study had revealed a strong national increase in the supply of education doctorates, this fact would have been thoroughly investigated to determine whether it actually stemmed from an increase in demand by public school employers.

¹² We could also look at enrollment per doctorate employed in the public schools. But the number of doctorates employed is not available nationally.

¹³ The validity of this comparison assumes that about the same percentage of education doctorates take employment in elementary and secondary school in the nation as do in California.

Employment of Doctorates in the Public Schools of California Compared to that in Comparable States

An indicator that might suggest the conclusion that California increase its production of education doctorates is a higher prevalence of doctorates among school district administrators in comparable states. This study (see Appendix E) compares California to Florida, Illinois, New York, Pennsylvania, and Texas in terms of the percentage of incumbents who hold a doctorate in the positions of superintendent, central office administrator, high school principal, elementary school principal, and other school-site administrator. These states are in some respects (though none really is totally) comparable to California in size, ethnic/cultural diversity, and income distribution.

The key findings in this comparison are:

- California has a lower percentage of incumbents who hold a doctorate than Illinois and Pennsylvania in all administrative positions—superintendent, central office administrator, high school principal, elementary school principal, and other school-site administrator.
- California has substantially more doctorates in central office positions than New York (13.3% versus 9.4%), but trails that state in all the other administration categories.
- California leads Florida in doctorates in the positions of superintendent, central office administrator, and high school principal. But California has a lower percentage of doctorates than Florida serving as elementary school principals and other site administrators.
- California has a higher percentage of persons who hold a doctorate than Texas in all administrative categories.
- To summarize, the number of doctorates per 1000 administrators in the selected states is as follows:

<u>State</u>	<u>Number of Doctorates per 1000 Administrators</u>
Pennsylvania	173
Illinois	134
New York	99
CALIFORNIA	91
Florida	61
Texas	58

It is difficult to determine from these data whether California should be seeking to produce and employ more doctorates. It would be good to know what the trend has been in these other states—in California it has been down for the last fifteen years as pointed out earlier in this chapter—but that information is not readily available. If California were at the bottom of this list, it might suggest a deficiency in the State. Given the limited information available, however, the employment rate is not a useful indicator of the need to produce more doctorates for administrative positions in the public schools.

The Views of Public School Superintendents, Deans of CSU Schools of Education, and Deans of Education in Institutions of Higher Education That Produce Education Doctorates

Another way to assess whether the public schools should employ more administrators who hold a doctorate is to solicit the opinions of those who are most knowledgeable about the knowledge, skills, and abilities of public school administrators. Therefore, public school superintendents, deans of CSU schools of education, and deans of schools of education in institutions of higher education (IHEs) that produce education doctorates were asked whether California needs more superintendents, principals, and central office administrators who hold a doctorate in education (See Appendices G, I, and J).

Need for More Superintendents and Principals Who Hold a Doctorate. The Table below shows the percentage of respondents of each type who indicated a high need (a rating of 4 or 5 on a scale of 1 to 5) for more doctorates in education in the positions of superintendent and principal. The views of superintendent respondents are broken out, first, between small districts (< 2,500 enrollment) and larger districts (> 2,499 enrollment) and, second, between superintendents who hold a doctorate and those who do not.

Views of the Need for More Doctorates in Education in the Positions of Superintendent and Principal

Percentage of Respondents Indicating High Need
(4 or 5 on scale of 1 to 5)

	<u>Small District Superintendents</u>		<u>Larger District Superintendents</u>		<u>Deans of Doctoral Programs</u>	<u>CSU Deans of Education</u>
	<u>No Doc</u>	<u>Have Doc</u>	<u>No Doc</u>	<u>Have Doc</u>		
Superintendent	12%	84%	10%	72%	77%	95%
Principal	0%	55%	4%	38%	65%	84%

The responses can be summarized as follows:

- Deans of doctoral programs, CSU deans, and superintendents who hold a doctorate are, for the most part, in agreement that California needs more superintendents who possess a doctorate.
- Superintendents who do not hold a doctorate (in both larger and small districts) see little need for more superintendents who have a doctorate.
- The perceived need for more principals with a doctorate in education is less for all groups of respondents than the indicated need for more superintendents to have a doctorate.

Another view of the issue is the importance given by superintendents to having a doctorate in educational administration/leadership for doing a good job in an administrative position. These views of superintendents in small and large districts are summarized in the following Table:

**Views of Superintendents of the Importance of Having a Doctorate
In Education Administration/Leadership
For Doing a Good Job as A Principal or Superintendent**

Percentage of Superintendents Giving a High and Low Importance Rating

	<u>Low Rating (1 and 2)</u>		<u>High Rating (4 and 5)</u>	
	<u>Small Districts</u>	<u>Larger Districts</u>	<u>Small Districts</u>	<u>Larger Districts</u>
Superintendent	40%	20%	32%	70%
High School Principal	61%	39%	9%	27%
Elementary Principal	77%	54%	5%	14%

These responses can be summarized as follows:

- Small-district superintendents are much less likely to think that having a doctorate in education administration/leadership is very important for doing a good job as a superintendent or principal than large-district superintendents.
- The importance for principals is seen as substantially less than for the superintendent.

As was found with respect to the need for more doctorates, there is a difference between the views of superintendents who hold a doctorate and those who do not:

- 50% of those who do not have a doctorate rated it unimportant that a person have a doctorate in education administration/leadership for doing a good job as a superintendent, while 90% of those who have the advanced degree gave it a high rating for importance.
- The difference between those with and without a doctorate is less with respect to the importance of a doctorate for principals. Less than half of superintendents who held a doctorate gave high ratings to importance for high school principal, and only 20% rated importance high for elementary school principal. Zero percent of those without a doctorate gave high ratings of 4 or 5 to importance for a high or elementary school principal.

In sum, significant majorities of CSU deans, deans of IHEs that award doctorates, and superintendents who hold a doctorate indicate a need for more education doctorates among superintendents and principals in the public schools. This supports the view that California should expand production of the advanced degree in education. On the other hand, superintendents who do not have a doctorate, who presumably see themselves as doing a good job without it, see little need for more doctorates in the positions of superintendent and principal.

In terms of importance of the doctorate in education administration/leadership for doing a good job, none of the subgroups (small and larger districts, those with and without a doctorate, and combinations of these two variables) gave high ratings for either high or elementary school principals. However, larger-district superintendents and those with a doctorate gave high ratings to the importance of having a doctorate in education administration/leadership for doing a good job as a superintendent. These findings suggest the knowledge, skills, and abilities imparted by doctoral programs are needed more by superintendents than by principals.

The preceding observation about principals is corroborated to some extent by findings regarding the benefits of alternative training for principals. In response to a question regarding whether there are professional development programs available for principals that provide training as beneficial as a doctoral program in education administration/leadership, 46% of larger-district superintendents responded affirmatively, 45% responded negatively, and nine percent did not know. Eighty-eight percent of small-district superintendents responded affirmatively, and 69% of the small-district superintendents who hold a doctorate answered affirmatively. However, only 35% of the larger-district superintendents who hold a doctorate supported the view that alternative training is available to principals that is as beneficial as a formal doctoral program in education administration/leadership.

Benefits of Doctoral Training for Superintendents and Principals. Those respondents who indicated a high need for more doctorates in the positions of superintendent and principal were asked to explain why. The objective was to gain an understanding of perceptions of the "value added" by doctoral training (see Chapters G, I and J).

- Superintendents indicated that the benefits of doctoral training were the following, in order of most frequent mentions: (1) symbolic value (credibility and respect as a basis for leadership), (2) general knowledge base, (3) leadership skills, (4) analytical skills, and (5) upgrade of the profession. The importance of the symbolic value is underscored by responses to another question in which superintendents were asked to compare the symbolic value of doctoral training to the value of the training itself. Forty-eight percent responded that the symbolic value exceeded the training value, and 77% indicated that the symbolic value is equal to or greater than the training value.
- Deans of IHEs that award doctorates in education emphasized three benefits of doctoral programs (these are not in order of importance, which was not possible to discern): (1) Knowledge of teaching and learning, (2) the ability to analyze data and relate research to practice, and (3) leadership skills that can be applied to improve instruction. The most persuasive statement of need for a doctorate in education was as follows: "Administrators and other school leaders need to (1) use theory and research consistently as an essential component in decision making;; (2) understand teaching and learning in depth; (3) view organizational structures and cultures as mechanisms through which to lead; and (4) direct and interpret program evaluation and research."
- Deans of CSU schools of education (which institutions provide much of the credential training for administrators in California) indicated the following benefits of doctoral training, essentially in order of importance: (1) Leadership skills to lead change, reform, and instructional improvement, including skills in inter-group dynamics, community relations, knowledge of the politics of education, and knowledge of organizational theory;

(2) the ability to understand research methods and the implications of high quality research, to conduct "action research" on existing problems, and to carry out program evaluation and assessment; (3) understanding of curriculum, learning theory, and instructional methods; and (4) the ability to command respect and to act professionally and ethically.

As can be seen, there is considerable congruence in the views of the three groups about the benefits of doctoral programs. However, without research to substantiate that doctoral students actually acquire these skills and that they are effectively applied in practice, we cannot be certain whether these are statements of goals or actual descriptions of the knowledge, skills, and abilities imparted by doctoral programs.

Careful review of the comments and responses of superintendents and others discloses a set of rewards that doctorates acquire independent of the content (and perhaps even of the quality) of the training program. It could be argued that these benefits of doctoral training are sufficient to warrant the expansion of production in California. These outcomes are as follows:

- Credibility and respect in the school district.
- Sense of satisfaction—self-confidence and courage—a foundation for leadership
- Exposure to new theories, concepts, and techniques—intellectual growth.
- Friends, contacts, and networks (who can be sources of advice and solutions to problems).
- Respect for research—less acceptance of the conventional wisdom without rigorous examination.

In this section it has been shown that there are large numbers of deans and superintendents who think California needs more persons who possess a doctorate in the ranks of superintendents and principals. The outcomes and benefits of doctoral training have been summarized as well as could be from the comments of the respondents. Taken as a whole, the views of superintendents, deans of CSU schools of education, and deans of IHEs that award doctorates offer an ample case in favor of expanding production of doctorates to be employed in California's public schools in the positions of principal and superintendent.

The Need for More Central Office Administrators Who Possess a Doctorate in Education.

In Chapter 6, the number and positions of doctorates in central office administrative posts were described in detail. In the surveys, superintendents were asked to indicate the administrative positions (or roles, which is more appropriate for small districts) in which California needs more persons who hold a doctorate, and deans of CSU schools of education and of IHEs that award doctorates in education were asked to prioritize the need for doctorates in various educational specializations (see Appendices G, I, and J). The Table below shows the percentage of superintendents who gave a high rating (a 4 or 5 on a scale from 1 to 5) to the importance of having incumbents of specified positions possess a doctorate.

Importance of Having More Doctorates in Specified Positions or Roles in the Public Schools			
	Larger Districts		Small Districts
	All Respondents		All Respondents
Administrative Position	Percent High Importance	Administrative Position	Percent High Importance
Deputy Superintendent	65%	Head of research and evaluation	44%
Associate Superintendent	60	Deputy Superintendent	33
Head of research & evaluation	58	Associate Superintendent	24
Head of curriculum & instruction	45	Head of curriculum & instruction	20
Head of staff development	32	Head of staff development	13
Head of pupil services	26	Head of special education	7
Head of staff personnel	25	Head of compensatory education	7
Head of special education	24	Head of staff personnel	6
Head of finance/business	16	Head of pupil services	6
Head of bilingual education	16	Head of bilingual education	0
Head of compensatory education	14	Head of finance/business	0

First, it should be clear from the Table that superintendents of small districts typically see it as much less important that incumbents in these positions (or roles) possess a doctorate than superintendents of larger districts. Second, the high ranking given to Head of Research and Evaluation by both groups of superintendents is noteworthy, though not surprising, and particularly interesting in the case of the small-district superintendents. Third, the ranking of Head of Staff Development above other important positions is surprising since it was reported in Appendix D that one of five Heads of Staff Personnel and Pupil Services holds a doctorate in California, while only one of eight Heads of Staff Development has the degree. Finally, it should be pointed out that generally low percentages (less than a third in many cases) of superintendents ascribe high importance to the doctorate for many positions. These findings support the view that California may want to increase the production of education doctorates only in selected fields—Education Administration/Leadership and Educational Psychology

While superintendents were asked to evaluate the need for more doctorates in terms of administrative positions, deans of IHEs that award doctorates and CSU deans were queried about the importance of increasing employment in the public schools of persons who hold a doctorate in specific educational specializations. CSU deans were also asked to give their priorities for the establishment of new joint-doctoral programs. The responses are summarized in the Table below (specializations are listed in order of importance):

Priorities for the Production of Education Doctorates

Percentage Indicating Highest Importance
To Increase Number in the Public Schools

Percentage Indicating Top Priority

<u>Deans of Doctoral Programs</u>		<u>CSU Deans</u>		<u>CSU Deans Priorities for New Joint-Doctoral Programs</u>	
Ed. A/L	50%	Ed. A/L	89%	Ed. A/L	93%
C & I	40	C & I	47	Spec. Ed.	56
Ed. Psych.	27	Ed. Psych.	47	C & I	47
Teach Fd.	21	Sch. Psych.	24	Teach Fd.	29
Spec. Ed.	20	Spec. Ed.	18	S/P Found.	18
C & G	13	Teach Fd.	13	Ed. Psych.	12
Sch. Psych.	13	C & G	12	Sch. Psych.	12
Adult	0	Adult	6	C & G	12
S/P Found.	0	S/P. Found.	6	Adult	6

Additional Specializations Mentioned (all mentioned only once except where indicated in parentheses)

Deans of Doctoral Programs: Urban Education, Multicultural Education, Instructional Leadership, Language and Literacy, Staff Development, Testing and Assessment.

CSU Deans' Specializations: Reading/Literacy (2), Business Administration, Communications, Ethics, Higher Education Administration, Instructional Technology, Urban Educational Leadership.

CSU Deans' Joint-Doctoral Priorities: Reading/Literacy (3), Educational Technology (2), Assessment and Program Evaluation, Mathematics Teaching Field, Rehabilitation Counseling, Urban Educational Leadership.

There is substantial agreement between the CSU deans and the deans of doctoral programs about high and low priority needs among the educational specializations (the first two columns). As for priorities for new joint-doctoral programs, CSU deans give Special Education a high priority (56% of the deans indicated new joint-doctoral programs in this field are a top priority), and surprisingly low priority to Educational Psychology (only 11.8% of the deans gave a top priority ranking to Educational Psychology). Of course, priorities in the establishment of new joint-doctoral programs depend on many factors--particularly on the qualifications and interests of the faculty--but there appears to be a significant divergence between the high importance given to the need to increase employees in the public schools who have been trained in Educational Psychology (ranked second in importance with Curriculum & Instruction) and the relatively low priority given to this specialization for the establishment of new joint-doctoral programs.

In conclusion, a great majority of deans of both CSU schools of education and IHEs that offer doctorates are of the opinion that the public schools need more doctorates (this is particularly

evident when we combine the importance ratings of 4 and 5—see Appendices I and J), but the need is focused on three specializations—Educational Administration/Leadership, Curriculum & Instruction, and Educational Psychology. There is also some emphasis on the need for more doctorates in Teaching Fields and particularly in the specialization of Reading. These findings support the view that, in terms of the needs of the public schools, California's IHEs should expand production of education doctorates, but only in the identified specializations.

The Content of Doctoral Programs In Education Administration/Leadership. The view that California needs more persons in administrative positions who hold a doctorate in Education Administration/Leadership requires an understanding (or perception) of the knowledge, skills, and abilities that doctoral programs impart to their participants. If there is disagreement among authorities about what the goals of doctoral programs should be, or if there is incongruity between what the producers of doctorates in Education Administration/Leadership say their programs impart and what knowledgeable practitioners and observers say should be imparted, the argument for increased production is weakened.

In the surveys, superintendents and CSU deans of schools of education were asked to identify the five most important skills, abilities, areas of knowledge, and experiences that a doctoral program in Education Administration/Leadership should provide its participants. Deans of such doctoral programs, on the other hand, were asked to identify the five most important skills, abilities, areas of knowledge, and experiences that their programs actually impart to their doctoral candidates. The results are summarized in the following Table (see Appendices G, I, and J for detailed analysis):

**Content of Doctoral Programs
Top Five Content Areas by Respondent Group**

Superintendents of

Small
Districts

Change Agent skills
Leadership skills
Knowledge of School Finance
Knowledge of Instructional. Methods
Knowledge of Politics of Education

Deans of
Doctoral
Programs

Leadership of Diversity
Leadership skills
Practical Dissertation
Knowledge of Org. Theory
Clinical Practice

Large
Districts

Change Agent skills
Knowledge of Org. Theory
Leadership skills
Communication skills
Leadership of Diversity*

CSU Deans of
Schools of
Education

Leadership of Diversity .
Change Agent skills
Leadership skills
Knowledge of Org Theory
Knowledge of Ed. Politics**
Communication skills**

Superintendent Subgroups

Large Districts

Group 1—56 Superintendents

Change Agent Skills
Leadership skills
Communication skills
Knowledge of Organizational Theory
Leadership of Diversity

Group 2—36 Superintendents

Knowledge of Instructional Methods
Knowledge of School Finance
Knowledge of Organizational Theory
Leadership of Diversity
Knowledge of Politics of Education

CSU Subgroups

- (1) Instructional Leader
- (2) Practical Leadership Skills
- (3) Leaders with theoretical knowledge
- (4) Unique program

*Capacity to provide leadership in an organization characterized by diversity

**Equal

The findings can be summarized as follows:

- Superintendents of large school districts and CSU deans of schools of education have very similar views of what doctoral programs should provide. They both give heavy emphasis to leadership skills.
- Cluster analysis of the CSU deans' responses revealed three slightly different emphases within the leadership framework: (1) A doctoral program in Education Administration/Leadership that focuses on "Instructional Leadership" and includes "Knowledge of instructional methods and related research" which the other CSU subgroups do not include; (2) a program that emphasizes practical leadership skills; and (3) a program that emphasizes theoretical knowledge of organizational dynamics, completion of a discipline-based dissertation, and leadership skills.
- The deans of doctoral programs indicate that their programs have an emphasis on leadership skills desired by large-district superintendents and the CSU deans. However, the deans of IHEs that produce doctorates also give high importance to completion of a practical dissertation and "clinical practice involving field-based problem solving." Cluster analysis did not reveal distinct subgroups, but showed that several individual programs had different emphases from the great majority.

- Small-district superintendents differ from large-district superintendents in that they want knowledge in the specific areas of instructional methods, school finance, and the politics of education.
- Cluster analysis within the large-district superintendents revealed two distinct subgroups: (1) A group of 56 superintendents who desire heavy emphasis on leadership skills in a doctoral program in Educational Administration/Leadership; and (2) a group of 36 superintendents who want greater emphasis on the knowledge base, particularly knowledge of instructional methods, school finance, organizational theory, and of the politics of education.
- Superintendents give little emphasis to completing a dissertation as an important part of a doctoral program in Administration/Leadership. Also, except for one subgroup, the CSU deans do not give high importance to the dissertation. However, half of deans of doctoral programs consider the dissertation one of the five most important elements of their doctoral programs.

In conclusion, many superintendents share a consistent view with CSU deans, and to a lesser extent with the deans of doctoral programs, of what a doctoral program in Education Administration/Leadership should consist. However, it is also apparent that significant numbers of large-district superintendents and most small-district superintendents want a doctoral program that emphasizes, in addition to leadership skills, knowledge in specific areas—school finance, instructional methods, the politics of education, and organizational theory—which are program elements that appear to be of lower priority to the deans. But this conclusion should not be stretched too far. There is obviously considerable variation among doctoral programs in what they offer, and just because a dean gives priority to some elements does not mean that inadequate attention is given to other elements. However, a program in Educational Administration/Leadership that does not offer instruction in the areas of knowledge that have been mentioned is sure to disappoint some participants.

The Need for More Education Doctorates in Special Situations

This study has examined the prevalence of doctorates in terms of a variety of characteristics including school district size and location, gender, ethnicity, age of doctorates, and others. This section assesses the need for more doctorates in specific situations.

Gender. In the early 1980s the gender trend lines crossed for production of education doctorates in California (see Appendix B). Since at least 1983 (and probably a couple of years earlier) more female education doctorates have been produced annually in the State than male doctorates. In 1998, 278 women were awarded an education doctorate, while only 135 males received the degree.

California has not been unique in this regard. Nationally, from 1981 to 1998, the production of male doctorates declined by 38%, while in California production fell 35% from 1978 to 1998 (see Appendix C). During the same periods, production of female doctorates increased 20% in the nation and 53% in California.

In terms of the occupants of administrative positions, this study has shown (see Appendix D) that in 1998 among superintendents, a slightly higher percentage of females have a doctorate than males, among central office administrators, substantially more males have a doctorate, and among principals, slightly more males have doctorates. However, for both principals and central office administrators there are more females who hold a doctorate than males because there are significantly more female incumbents in these positions.

In the future, the prevalence of doctorates among females who hold administrative positions will almost certainly exceed that of males. If equality between the genders is a goal, then clearly California needs to produce more male education doctorates.

Ethnicity. There has been a major increase in the production of ethnic-minority education doctorates in California over the past twenty years. In California, the number of ethnic minorities earning an education doctorate increased by 75% between 1978 and 1998—this compares to a national increase of 26% between 1981 and 1998. At the same time, national production of white doctorates declined 21%, but in California the output of white education doctorates fell only 2.4%. In California, white women have replaced white males. In 1998, there were 284 white education doctorates and 117 ethnic-minority doctorates (see Appendix B). Thus, despite the increase over the last twenty years, ethnic minorities in California in 1998 received disproportionately fewer education doctorates.

In terms of the incidence of doctorates among position incumbents (see Chapter 6), there was rough equality in 1998 across ethnicities in the position of superintendent, except that Asians had fewer superintendents who held a doctorate (32% compared to the statewide total of 47.6%). (It should be noted that the issue of the number or percentage of administrative positions held by ethnic minorities, while important, is a different issue from the one addressed here.)

In central office administrative positions, there was substantial variation across ethnicities in 1998, as follows:

<u>Ethnicity</u>	<u>Number of Administrators</u>	<u>Percentage of Central Office Administrators Who Hold A Doctorate</u>
Filipino	51	17.6%
Pacific Islander	12	16.7
White	5,418	14.2
American Indian	48	10.4
African American	632	10.1
Hispanic	824	9.1
Asian	276	6.9

The relatively low percentage of Asians in central office administrative positions who held a doctorate stands out.

There was also considerable variation in 1998 across ethnicities in the prevalence of doctorates in the position of principal

<u>Ethnicity</u>	<u>Number of Principals</u>	<u>Percentage of Principals Who Hold A Doctorate</u>
Pacific Islander	14	21.4%
American Indian	49	18.4
Asian	205	8.8
African American	607	8.7
White	5,305	7.9
Hispanic	930	5.6
Filipino	46	4.3

Here, Asians have a higher percentage of doctorates than the other large ethnic groups—perhaps this reflects more recent entrance into the doctoral system by persons from Southeast Asia. Hispanic principals who held a doctorate were relatively few compared to the other large ethnic groups.

In conclusion, the relative incidence of doctorates among minorities in administrative positions is mixed. Most minorities who attain the positions of principal or superintendent are about as likely as whites to hold a doctorate. In the central office administrative positions, members of the large minority groups are less likely than whites to hold a doctorate.

Gender Within Ethnicity. The California production figures outlined above mask significant differences between genders within ethnicities. Significant trends have occurred within Asians, Hispanics, African Americans, and Whites, as follows::

<u>Production of Education Doctorates Percentage Change, 1978 to 1998</u>		
<u>Ethnicity</u>	<u>Males</u>	<u>Females</u>
African American	-19%	+56%
Asian	0	+50
Hispanic	+25	+500
Whites	-42	+44

Thus, large percentage increases have occurred in the production of female doctorates, particularly in the case of Hispanic women, while the output of male African American and White doctorates have declined. However, the numbers for the minority groups are very small (the increase for Hispanic women is from 6 to 30, that for African American women is from 16 to 25, that for Hispanic men is from 12 to 15, and the decline for African American males is from 16 to 13). The decline for white males is large however, from 153 to 89; and the increase for white women is also large, from 135 to 194.

In conclusion, based on 1998 data, it can be argued that there is a need for the production of more ethnic-minority education doctorates, based on disproportionality with their population in the State and on lower rates of possession of the doctorate in central office administrative

positions. In addition, few minority male doctorates were produced in 1998 compared to minority females, and compared to majority males and females.

Age of Doctorates. Education doctorates in California and the nation are relatively old compared to recipients in other academic and professional fields. In California, in 1998, 46% of the education doctorates were awarded to persons over 45 years of age. Only 20% of doctorates were received by persons under 36 years of age, and only 5% were under 31 years old (see Appendix C).

Table J-1 shows that of 2,034 persons in administrative positions in the public schools in 1998 who held a doctorate, only 576 (28%) were under the age of 50.

Growth and Decline of the Production of Specializations. The decades have witnessed a shift in the education specializations produced by IHEs (see Appendices A and B). In California and the nation, there has been a shift from traditional specializations, such as Counseling and Guidance, Special Education, Adult and Continuing Education, Educational Psychology, and Curriculum and Instruction, to Education Administration/Leadership and to specializations with new names such as Multicultural Education and Education Policy. The Table below shows the changes for California from 1988 to 1998 and for the nation from 1981 to 1998.

**Percentage Change in Doctorates Awarded in Selected Specializations
California and the Nation**

<u>Specialization</u>	<u>California 1988-1998</u>	<u>Nation 1981-1998</u>
Administration/Leadership	+47%	+23%
Curriculum & Instruction	-15	+4
Testing, Measurement, & Assessment	-100 (from 9 to 0)	+13
Educational Psychology	-20	+6
School Psychology	+75 (from 4 to 7)	+24
Counseling and Guidance	-64	-53
Special Education	-53	-25
Adult & Continuing Education	-100 (from 3 to 0)	-30
Pre-Elem., Elem., Secondary	--- (from 0 to 5)	-58
Higher Education	-35	-36
Teaching Fields	+19	-38
Social/Philosophical Foundations	+78	-34
Education, General	-49	-49
Education, Other	+45	+77

The percentages shown above can be somewhat misleading in particular instances because there are considerable fluctuations between years in the production of doctorates in individual specializations. Nevertheless, in California the trend has been flat to down for all traditional specializations except Education Administration/Leadership which has grown sufficiently to result in an 8.9% overall increase in education doctorates from 1988 to 1998.

The decline in doctorates in Educational Psychology and Testing, Assessment, and Measurement has occurred at a time when interest in achievement, as measured by standardized tests, has grown rapidly and new programs have been established linking awards, sanctions, and even graduation to performance on statewide exams. This decline in Educational Psychology, the opinions of superintendents and deans that the public schools need more persons with expertise in educational psychology and research and evaluation, plus the financial rewards and penalties that have been attached to performance, suggest there is a need for the IHEs to produce more doctorates in educational psychology.

Curriculum and Instruction and the Teaching Fields have suffered over the years--production has been essentially flat during the nineties while public school enrollments have grown 28% (the 19% increase for Teaching Fields represents an increase from 21 doctorates in 1988 to 25 doctorates in 1998). For the same reasons that indicate a need for the production of more doctorates in educational psychology, plus the ongoing efforts in California to reform methods of reading instruction, it would seem that an increase in the production of specialists in curriculum and instruction and in selected teaching fields would be appropriate.

Possible Shortage of Education Doctorates in Small School Districts and in Certain Regions of the State. In Chapter 6, based on 1998-99 data, it was observed that the larger the school district, the more likely the superintendent possesses a doctorate. Also, it was shown that small districts in the Central Valley, Rural North, and Rural Mountains are less likely to have a superintendent who holds a doctorate than small districts in the Urban South and in suburban areas (see Appendix D for the delineation of regions). Furthermore, Central Valley, Rural North, and Rural Mountain regions had significantly fewer county office of education superintendents who hold a doctorate than other regions in the State.

The Table below illustrates the relationship between central office administrative "doctoral resources" per district and district size. Clearly, the larger the district, the more central office administrators there are who hold a doctorate.

**Central Office Administrators with Doctorates by Size of District
1998-1999**

<u>District Size</u>	<u>Number of Districts</u>	<u># of Central Office Office Administrators with Doctorate</u>	<u># of Central Office Admini- strators with Doctorate Per District</u>
< 2,500	495	32	0.07
2,500-4,999	134	82	0.61
5,000-9,999	134	158	1.18
10,000-19,999	87	195	2.24
20,000-39,999	57	170	2.98
40,000 +	13	142	10.92
County Offices	58	173	2.98

The study also addressed the question of the prevalence of principals who hold a doctorate in various regions of the State (see Appendix D). It was found that Southern California has a higher percentage of principals who hold a doctorate than other regions, and that the Central Valley and Rural North have the lowest percentages. However, as shown in the Table below, the Central Valley and the Rural Mount regions have significantly higher percentages of high school principals who hold a doctorate than elementary schools principals.

Principals with A Doctorate						
By School Level and Region, 1998-99						
	Elementary		Secondary		Total Principals	
	Number of	Percent with	Number of	Percent with	Number of	Percent with
Region	Principals	Doctorate	Principals	Doctorate	Principals	Doctorate
Urban South	2266	8.8	478	13.0	2744	9.5
Southeast	625	6.9	139	16.5	764	8.6
Rural Mountain	76	3.9	30	16.7	106	7.5
Suburban North	358	7.3	98	7.1	456	7.2
Central Coast	392	6.4	86	8.1	478	6.7
Urban North	1167	6.1	241	6.6	1408	6.2
Central Valley	713	5.0	185	9.7	898	6.0
Rural North	256	5.1	110	7.3	366	5.7
Total	5853	7.1	1367	10.7	7220	7.8

In conclusion, smaller districts and rural regions tend to have fewer "doctoral resources" than larger districts and the urban and suburban areas of California. Equalization of doctoral resources (if this were a policy goal) would probably not be achieved by simply increasing the statewide production of education doctorates, even if the increase were large in percentage terms. It has been shown (see Chapter 9) that superintendents in small districts look favorably upon alternatives to doctoral programs in the training of principals, and that what they want in a doctoral program, in addition to leadership training, is instruction in specific topics such as instructional methods, school finance, organizational theory, and the politics of education. These findings suggest that courses focused on specific topics, perhaps delivered by the latest telecommunications technology, might help the rural areas acquire the "doctoral resources" that they lack.

Who Employs Education Doctorates. An important finding in this study is the apparent relatively small percentage of education doctorates who actually go to work in elementary and secondary education. Based on 1998 data, it is estimated that only about 28% of each doctoral class produced in California seeks (or continues to) work in the public schools. Additional research is needed to verify this finding, to explain it, and to understand variation among IHEs in where their graduates find employment. It has been noted that a number of comments were made by deans of CSU schools of education about a need for more education doctorates to teach in the CSU system. Additional research is needed to understand the competition for doctorates among educational systems—especially since it has been well established in this study the K-12 has not shown an interest in competing financially to attract leaders who hold a doctorate.

Summary of Findings Concerning Doctorates in the California Community Colleges

Appendix H presents findings concerning the prevalence of doctorates in administrative positions in the California Community Colleges, and the views of Superintendents, Presidents, and Chancellors on a variety of issues related to the doctorate. The Chief Executive Officers (CEOs) of all community colleges and districts were sent a survey questionnaire and 85% responded.

Educational Attainment of Chief Executive Officers

About 83% of the CEOs in the community colleges possess a doctorate (the percentage is about the same for Chancellors and campus leaders). Of those with a doctorate, 72% (including Ph.D.s and Ed.D.s) earned the degree in education, while 28% have a doctorate in a discipline other than education.

The CEOs have earned their advanced degrees at universities all across the nation. Forty-five institutions have contributed to the leadership of the community colleges in California, with only the University of Southern California accounting for more than 7 percent.

Importance of the Doctorate

The CEOs were asked a number of questions about the importance of the doctorate for community college administrators. The findings are as follows:

- The CEOs indicated that they acquired their doctorates for job advancement and promotion, intellectual growth, personal satisfaction, and acquisition of organizational and leadership skills. Of lesser importance were societal and community expectations, salary increase, and career field change. Five of the CEOs said they were currently enrolled in, or planning to enroll in, a doctoral program. These five gave essentially the same reasons for pursuing the doctoral degree as those who already possess it.
- Of the 13 CEOs who do not hold a doctorate and do not plan to attain one, the primary reason for not pursuing the degree is lack of time. Six CEOs indicated some concern about the proximity of a doctoral program, but for five this issue was "not important at all."
- Only 66% of the CEOs who hold a doctorate responded that the degree was "essential" for securing their current position. Thus, about one-third indicated it was only "very helpful" or less important. While 83% of White males said possession of the degree was essential for securing their current position, only 22% of African Americans, 50% of Asians, 54% of Hispanic males, and 61% of women agreed with this assessment.
- CEOs were asked how important the doctoral degree was in carrying out their job responsibilities. Overall, 75% said the degree was "essential" or "very helpful" in doing their job; but 47% of those with a Ph.D. in a discipline other than education ascribed low importance, saying the degree was "somewhat" or "minimally" helpful. An interesting

difference emerged between those who hold a Ph.D. in education and those who hold an Ed.D. Ninety-four percent of the former found their degree "extremely" or "very helpful," but only 76% of those with an Ed.D. in education gave the same high ratings.

- CEOs were asked about the expectations in their districts with respect to the possession of a doctorate by key administrative leaders, and they were asked whether they thought the positions should be expected to be held by persons who hold a doctorate. As shown in the Table above, only 50% of the CEOs indicated their districts expected Vice-Presidents for Instruction to hold a doctorate, and even fewer, 32%, said their districts expected the Vice-President for Student Services to hold a doctorate. The CEOs, however, had higher expectations than their districts, 70% indicating that VPs for Instruction should have a doctorate, and 55% saying that VPs for Student Services should be expected to hold a doctorate.

Expectations for Possession of A Doctorate By Key CC Leaders
Percentage of Respondents

	Is Position Holder Expected to Hold a Doctorate in Your District?	Across the State, Should Position Holder Be Expected To Have a Doctorate?
Position	Pct. YES	Pct. YES
District Chancellor	88.0	93.6
Campus President	79.4	85.3
VP/Dean Instruction	50.0	70.1
VP/Dean Student Services	32.1	55.1
Deans of Occupational/Vocational Ed.	6.6	8.6

- CEOs were also asked what type of doctorate was preferable for each of the key leadership positions (an Ed.D. in education, a Ph.D. in education, or a Ph.D. in another discipline). As shown in the Table below, nearly half the respondents think that all three types are equally preferable. Another 25% prefer a doctorate in Higher Education (either an Ed.D. or a Ph.D.). About 10% prefer an Ed.D. in Higher Education, zero to nine percent (depending on the position) prefer a Ph.D. in Higher Education, and seven to eleven percent (depending on the position) prefer a Ph.D. in another discipline. Appendix H provides the reasons CEOs gave for their preferences.

Position
District Chancellor
Campus President
VP/Dean of Instruction
VP/Dean Student Services
Deans of Occupational/Vocational Ed.

Preferred Type of Doctorate for Position				
			(4)	
			Ph.D. in a	
(1)	(2)	(3)	Discipline	(5)
Ed.D. in	Ph.D. in	(1) & (2)	Other	(1), (2), & (4)
Higher	Higher	Equally	Than	Equally
	Education	Preferable	Education	Preferable
10.4	9.4	25.5	7.5	46.2
11.5	8.7	25.0	7.7	46.2
10.0	5.0	26.0	11.0	48.0
10.4	4.2	28.1	9.4	47.9
13.2	0.0	22.4	7.9	56.6

- CEOs were asked to compare the symbolic value of the doctorate versus the training value. Eighty percent said the symbolic value is of equal or greater value than the training.
- Finally, CEOs were asked how important is it, for purposes of advancement in community college administration, that a doctorate be from a regionally-accredited institution rather than from a non-accredited IHE. Eighty-five percent of the respondents indicated that it is "extremely" or "very" important that the degree come from an accredited institution.

Prevalence of Doctorates in Community College Administration

An attempt was made in this study to conduct an inventory of doctorates in community college administrative positions. Because of certain limitations in the method used to collect the information, the results cannot be viewed as a precise inventory. However, the data for Chief Instructional Officers (CIOs) and Chief Student Services Officers (CSSOs) are probably the most accurate.

It was found that many of the key leaders in the community colleges do not have a doctorate. The percentages who do not hold a doctorate are as follows:

Position	Number of Incumbents Identified in the Survey	Percentage Not Holding a Doctorate
Chief Instructional Officer	78	44%
Chief Student Services Officer	74	54
Chief Administrative Officer	38	72
All Others Identified as Vice-Presidents	47	53
Deans and Directors	619	62
Total	857	60

Perceptions of Supply and Demand, Availability of Training, and Alternatives to a Doctoral Program

Perceptions of Supply and Demand. The majority of Community college CEOs think that the demand for CC administrators with "an appropriate doctorate" exceeds the supply of such persons. Fifty-one percent think that demand "greatly exceeds" or "exceeds" supply, while only 14.0% think supply "greatly exceeds" or "exceeds" demand. Very few (only 2.8%) of the CEOs hold the view that supply "greatly exceeds" demand. About one-third indicated that supply and demand are "in balance."

Analysis reveals that CEOs with more administrative experience tend to see demand exceeding supply, as shown in the following Table.

Perception of Supply and Demand for Doctorates in CC Administration by Years of Experience as a CC Administrator

<u>Years as CC Administrator</u>	<u>Number of CEOs</u>	<u>Percentage Who Responded That:</u>	
		<u>Supply and Demand are in Balance</u>	<u>Demand "Greatly Exceeds" or "Exceeds" Supply</u>
Less than 13	19	42.1	36.9
13 to 18	23	39.1	47.8
19 to 21	22	31.8	50.0
22 to 27	22	22.7	59.1
More than 27	21	19.0	61.9

Availability of Training. Questions about the availability of training for community college administrators elicited the following responses:

- Sixty percent of the CEOs said there is no doctoral program in CC administration/leadership within a "reasonable commuting distance" of their campus.
- Only 12% indicated that CC administration training was available at the closest CSU campus. Fourteen percent said they did not know.
- Thirty-one percent responded that training in CC administration/leadership was available at the nearest UC campus. Thirteen percent said they did not know.

- And forty-one percent said that training was available at the closest independent, accredited IHE, but 21% did not know.

Alternatives to Formal Doctoral Training. The CEOs were asked whether other forms of professional education could further the development of community college leaders as effectively as a formal doctoral program.

Overall, more than half (56.4%) of the CEOs think that there is no good substitute for a doctoral program. But that fact that more than 40% think other forms of training can be as effective is interesting—but not surprising in light of views of the importance of the symbolic value versus the training and the disagreement over what type of doctorate is most appropriate.

Several subgroups of CEOs have a view that is different from that of the overall majority. The key observations are:

- As would be expected, CEOs who do not have a doctorate are much more likely than degree holders to find value in alternative forms of training—two-thirds of them responded YES, while 61% of those who hold a doctorate responded NO.
- Those with the least administrative experience and those with the fewest years since receiving the doctorate (presumably, the younger CEOs) are more likely to see value in alternative forms of training.
- Seven of eight African Americans who hold a doctorate responded positively to the suggestion that other types of training could be an effective substitute for a doctoral program.

CEOs who responded affirmatively to the question about alternative training were asked to describe alternatives and to explain their reasons. Representative comments are contained in Appendix H. One of the most provocative was as follows:

“MBA or JD is preferable to Ph.D. The need is not for Ph.D. or Ed.D. The need is for expertise in labor issues, fund raising, management, research, legislative advocacy, fiscal, redevelopment, land use, facilities, strategic planning, and critical thinking. Time spent attaining a doctorate could be better spent gaining experience in an actual leadership environment. We need a terminal degree plus continuing education in all leadership areas of management, including legal, fiscal, and information technology.”

Community Colleges--Conclusions

The view of the doctorate in community college administration provided by the CEOs is a confusing and complex picture. It includes a surprisingly low percentage of key leaders who hold a doctorate and low general expectations for possession of the degree, mixed views of the type of doctorate that is preferable, emphasis on the symbolic value of the degree over its training value, some reluctance to admit that alternative forms of training would be as effective as a formal degree program, the belief that demand for doctorates exceeds supply, particularly

among older CEOs, the view of many that their doctoral program was very helpful or essential in carrying out their job responsibilities, indications that access to doctoral programs focused on CC administration is limited, and the view that administrative training at nearby institutions is often not available (or its availability is unknown).

This picture suggests that the advanced training of community college administrators is an undeveloped discipline. There appears to be ongoing tension between the views that CC leaders should have a doctorate in a discipline other than education, should have a practical Ed.D. in higher education, should have a research oriented PH.D. in higher education, or should have extensive practical training (perhaps including an MBA in CC administration) in specific fields such as legal issues, fiscal management, labor relations, marketing, and so forth. Thus, if one assumes that key CC leaders need additional advanced training, the question may be what is the best way to provide it.

Most likely, however, there is no single best way, the needs of administrators (and potential administrators) across the State varying greatly. But, it appears (additional investigations are needed) that there is a lack of readily available training opportunities, including the lack of advanced targeted coursework and doctoral programs (this study found that few of the education doctoral programs have specializations in community college administration, and only about 6% of the graduates in 1998 went into community college administration.) In short, continued work is needed to identify the training needs of CC administrators and to determine what mix of program types (doctoral programs, masters programs, focused summer academies, specific university courses, workshops, and other types) is needed to address the range of needs.

Policy Conclusions

The following policy conclusions are based solely on the findings of this study. Ultimately, policy recommendations must take into account information and points of view that are outside the scope of the study. This study suggests the following policy conclusions:

- Production of education doctorates by institutions of higher education in California, if continued at current levels, is sufficient to produce the supply necessary to meet current demand by public school districts, whether this demand is expressed in absolute numbers or as a percentage of administrators. No new State policies are needed to promote increased production to maintain the current demand for doctorates.
- Little evidence was found to suggest rising demand by public school districts for education doctorates. While anecdotal evidence indicates that competition for competent administrators is increasing and that prices are rising to attract the best candidates for superintendent, there is no indication that prices are rising to attract persons who hold a doctorate. For this reason and other reasons given earlier in this chapter, at this time it appears that no new State policies are needed to increase production of education doctorates in order to meet rising demand.
- Production of doctorates in many traditional educational specializations has been flat or declining over the past decade, including the fields of educational psychology and testing,

measurement and assessment. With increasing importance being given to individual student, school, and district performance on standardized exams (evidenced by new State policies linking rewards and sanctions to results on standardized tests), school leaders need better information and better analysis to identify and address the weaknesses in their programs. Based on the findings of this study, including the opinions of superintendents and education deans, it appears there is an unmet need for more doctorates in educational psychology—specifically in research, evaluation, testing, measurement, and assessment. California may want to further investigate this need, quantify its magnitude, and develop approaches to foster increased production of doctorates in this specialization.

- The production of doctorates in teaching fields has been declining for years. However, the deans of IHEs that produce doctorates and those heading up the CSU schools of education seem to have a renewed interest in teaching fields, particularly in the field of reading. The state not only needs expertise in the public schools in how pupils learn to read and in which instructional methods are most effective in teaching reading, it also needs such expertise among the faculty of institutions that provide teacher credential training. Consequently, the State should encourage IHEs to expand the production of education doctorates who are not only deeply schooled in learning theory related to reading, but who are also knowledgeable about current practice in California and the results of research on effective reading programs.
- Another area that may warrant additional emphasis in the production of education doctorates is staff development. Superintendents gave relatively high priority to increasing the number of leaders of staff development in school districts who possess an education doctorate. While staff development is not a traditional doctoral specialization, it has become increasingly important as schools and districts are being held more accountable for classroom results. The State should examine existing doctoral programs that emphasize staff development leadership (if any exist), and consider approaches to expanding programs that produce educational leaders who are knowledgeable about both adult and child learning.
- In California, nearly half of the recipients of education doctorates are over forty-five years old—fast approaching early-retirement age. Would not public school education benefit if more younger persons were participating in doctoral programs who could utilize their training for many years? To the extent that the training is effective, would it not be better to receive it near the beginning of one's career instead of within a dozen years of the end? California may want to consider incentives or pilot programs to increase the number of younger doctoral candidates, particularly younger ethnic-minority candidates.
- There is virtually no systematically-collected evidence that the "leadership training" offered in educational administration/leadership programs has an impact on administrator behavior, or that it results in improved organizational or student performance. Also, there is no information comparing the outputs of educational administration/leadership programs that have different goals and methods. Better understanding of these programs is needed before the State adopts any policies to expand production.
- As indicated by the preferences of a subgroup of superintendents of significant size (39% of large-district superintendents and many small-district superintendents), there may be a

substantial market for a doctoral program in educational administration/leadership that emphasizes a practical knowledge base—that is, instructional methods, school finance, the politics of education, organizational theory and related research, statistical analysis methods, school law, school construction and project management, research methods, and other topics. Acquisition of broad-based knowledge is frequently mentioned by practitioners as the most important product of doctoral programs, ahead of leadership skills. However, many current providers in the education administration field (and most of the potential future providers) are very focused on leadership training. This study suggests that the State may want to encourage a pilot joint-doctoral program accessible to leaders in rural areas that provides an emphasis on broad-based knowledge needed to deal with widely prevalent problems.

- Numerous respondents emphasized the need to produce “instructional leaders.” The “standards movement” and high-stakes tests have probably influenced this emphasis. However, it is surprising that rarely do the deans include “knowledge of instructional methods and related research” as a top priority of a program in Educational Administration/Leadership. The providers of such programs may want to reassess whether they are providing their graduates with the knowledge of learning theory, teaching methods, curriculum approaches and content, teacher training, classroom organization, and instructional resource requirements that an instructional leader should have.
- It was surprising to discover that only about 28% of the education doctorates produced in California in 1998 will be working in the public elementary and secondary schools. First of all, is this accurate? Second, if it is, should the IHEs be encouraged to admit candidates who plan to work in the public schools? What are the other important priorities, such as the apparent need to produce more doctorates in K-12 subjects to become professors of education at CSU? Additional research is needed to verify this finding, to explain it, and to understand variation among IHEs in where their graduates find employment. Also, investigations are needed to understand the competition for doctorates among educational systems—especially since it has been well established in this study that K-12 has not shown interest in competing financially to attract leaders who hold a doctorate.

Table K-1
Age Distribution of Certificated Staff With a Doctorate By Position, 1998-99

Position	Count	Average Age	Less																Greater	
			Than 50	Age 50	Age 51	Age 52	Age 53	Age 54	Age 55	Age 56	Age 57	Age 58	Age 59	Age 60	Age 61	Age 62	Age 63	Age 64	Age 65	Than 65
Superintendent	333	54.2	65	19	34	21	13	21	32	17	20	15	18	13	10	11	7	2	5	10
Deputy Superintendent	98	52.5	28	6	9	8	4	11	7	6	3	7	2	2	0	0	1	1	1	2
Other Certificated Administrators	748	52.8	186	62	54	67	51	47	45	46	45	34	24	23	17	12	9	6	6	14
Superintendent-Principal	37	53.1	6	3	4	5	2	4	2	3	1	4	1	0	0	1	0	0	0	1
Principal	550	51.4	198	32	38	40	39	27	34	24	31	22	19	15	7	5	3	3	3	10
Other School Site Administrators	248	51.0	90	23	19	12	13	9	14	20	9	11	7	2	5	2	3	0	0	9
Non-certificated Superintendent	19	54.4	3	2	0	1	1	0	4	3	3	0	0	1	0	0	0	0	1	0
Teaching Principal	1	52.0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2034	52.4	576	147	158	155	123	119	138	119	112	93	71	56	39	31	23	12	16	46

Retirement rates WSFurry at \$70K in 98-99/sheet2

Table K-2
Percentage of School District STRS Memebers Retired At or Above \$70,000 in Fiscal Year 1998-1999

Age	By age		Percentage retired at each age
	Total extracted	Total retired during fiscal year	
50	1,160	0	0.0000%
51	1,335	0	0.0000%
52	1,529	1	0.0654%
53	1,202	1	0.0832%
54	1,218	3	0.2463%
55	1,207	23	1.9056%
56	1,247	12	0.9623%
57	1,002	43	4.2914%
58	903	37	4.0975%
59	796	44	5.5276%
60	679	98	14.4330%
61	491	83	16.9043%
62	369	64	17.3442%
63	299	69	23.0769%
64	242	54	22.3140%
65	176	49	27.8409%
Totals	13,855	581	4.1934%

Retirement rates WSFurry at \$70K in 98-99/sheet1

Appendix L Survey Instruments

Survey of Community College Chancellors, Presidents and Superintendents

Survey of Deans of CSU Schools of Education

Survey of Public School Superintendents

Survey of Deans of Education Doctoral Programs

CALIFORNIA POSTSECONDARY EDUCATION COMMISSION

Survey of Community College Chancellors, Presidents, and Superintendents

The California Postsecondary Education Commission is conducting this survey as part of a study of the doctorate in education pursuant to AB 1279 (by Assemblyman Scott). Responses will be kept confidential and will be reported only in aggregate form. Please return the completed survey in the enclosed envelope to the Commission as soon as possible. Please check () all "Yes" or "No" questions. Thank you for your cooperation

- **Institution:** _____
- **Name and position of Community College Chancellor, President, or Superintendent who is being asked to complete this questionnaire:** _____

1. How many years have you been in your current administrative position? _____

2. How many years have you been an education administrator?

- In community colleges: _____ years
- In four-year colleges: _____ years
- In public K-12 schools or districts: _____ years
- In other education institutions: _____ years

3. What is your gender? Female _____ Male _____

4. Which of the following best describes you? (please check one)

African American _____	Asian/Asian American _____
American Indian/Alaskan _____	Filipino _____
Hispanic/Latino/Chicano _____	Pacific Islander _____
White (non-Hispanic) _____	Other _____

5. Do you hold an earned doctorate? YES _____ NO _____ → IF NO, go to Question 16.

QUESTIONS FOR RESPONDENTS WHO HOLD A DOCTORATE

6. What type of doctorate do you hold? Ph.D. _____ Ed.D. _____
Other (specify) _____
7. In what area of specialization is your doctorate? _____
8. From which institution did you receive your doctorate? _____
9. In what year did you receive your doctorate? _____
10. How many years after you received your bachelor degree did you receive your doctoral degree? _____
11. From the time you entered your doctoral program, how long did it take to complete the doctoral degree? _____ years

12. While earning your doctorate, how much of that time were you

- (a) a full-time student? _____ years or _____ months
(b) employed as a CC teacher? _____ years or _____ months
(c) employed as a CC administrator? _____ years or _____ months

13. How important was possession of the doctorate in securing your current position?

Essential _____ Very Helpful _____
Somewhat helpful _____ Minimally helpful _____
Not a factor _____ Did not have doctorate when appointed _____

14. As preparation for your current responsibilities, your doctoral program was:

Essential _____ Very Helpful _____
Somewhat helpful _____ Minimally helpful _____
Not helpful at all _____

15. On a scale from 1 to 5, how important to you was each of the following reasons for attaining your doctorate?

Reason for Attaining Doctorate	Not Important At All				Very Important
	1	2	3	4	5
Job advancement and promotion	☐	☐	☐	☐	☐
Intellectual growth	☐	☐	☐	☐	☐
Organizational and leadership skills	☐	☐	☐	☐	☐
Career field change	☐	☐	☐	☐	☐
Salary increases	☐	☐	☐	☐	☐
Societal or community expectations	☐	☐	☐	☐	☐
Satisfaction of having doctorate	☐	☐	☐	☐	☐
Other (specify) _____	☐	☐	☐	☐	☐

GO TO QUESTION 18 ON PAGE 4

QUESTIONS FOR RESPONDENTS WITHOUT A DOCTORATE

16. Are you **currently enrolled** or do you **plan to enroll** in a doctoral program?

YES _____ NO _____ → IF NO, go to Question 17

IF YES,

- a. What is (will be) your degree objective: Ph.D. _____ Ed.D. _____ Other (specify) _____
b. What is (will be) your area of specialization? _____

- a. On a scale from 1 to 5, how important is each of the following reasons in your decision to enroll or in your plans to enroll?

<u>Reason for Enrolling</u>	<u>Not Important At All</u>				<u>Very Important</u>
	1	2	3	4	5
Job advancement and promotion	☐	☐	☐	☐	☐
Intellectual growth	☐	☐	☐	☐	☐
Organizational and leadership skills	☐	☐	☐	☐	☐
Career field change	☐	☐	☐	☐	☐
Salary increases	☐	☐	☐	☐	☐
Societal or community expectations	☐	☐	☐	☐	☐
Satisfaction of having doctorate	☐	☐	☐	☐	☐
Other (specify) _____	☐	☐	☐	☐	☐

GO TO QUESTION 18 ON PAGE 4

17. If you are **not currently enrolled** or **not currently planning to enroll** in a doctoral program, how important is each of the following reasons for not pursuing your doctorate?

<u>Reason for Not Pursuing Doctorate</u>	<u>Not Important At All</u>				<u>Very Important</u>
	1	2	3	4	5
Have felt no need of a doctorate	☐	☐	☐	☐	☐
No programs offered in reasonable proximity	☐	☐	☐	☐	☐
Family obligations interfere	☐	☐	☐	☐	☐
Can't afford the time	☐	☐	☐	☐	☐
Can't afford the costs	☐	☐	☐	☐	☐
Other (specify) _____	☐	☐	☐	☐	☐

GO TO QUESTION 18 ON PAGE 4

18. At present, is the doctorate generally expected of the following Community College administrators in your district?

Doctorate Expected?

District Chancellor	Yes	No	Uncertain
Campus President	Yes	No	Uncertain
Vice Presidents/Deans of Instruction	Yes	No	Uncertain
Vice Presidents/Deans of Student Services	Yes	No	Uncertain
Deans of Occupational/Vocational Education	Yes	No	Uncertain

19. In general, in community colleges across the State, do you think the doctorate should be expected of the following Community College administrators?

Doctorate Should Be Expected

District Chancellor	Yes	No	Uncertain
Campus President	Yes	No	Uncertain
Vice Presidents/Deans of Instruction	Yes	No	Uncertain
Vice Presidents/Deans of Student Services	Yes	No	Uncertain
Deans of Occupational/Vocational Education	Yes	No	Uncertain

20. With respect to the best qualifications for the job, which type of doctorate is preferable for the following community college administrators?

Preferable Type of Doctorate--Check one for Each Position

	(1) Ed.D. in Higher Edc.	(2) Ph.D. in Higher Edc.	(3) Ph.D. in a Discipline Other than Education	Ed.D. & Ph.D. in Higher Edc. Equally Preferable	Other (1), (2), & (3) Are Equally Preferable	Type of Doctorate (specify type)
District Chancellor	_____	_____	_____	_____	_____	_____
Campus President	_____	_____	_____	_____	_____	_____
V-Ps/Deans of Instruction	_____	_____	_____	_____	_____	_____
V-Ps/Deans of Student Services	_____	_____	_____	_____	_____	_____
Deans of Occup./Voc. Education	_____	_____	_____	_____	_____	_____

- If a single type of doctorate (i.e., the Ed.D. in Higher Education, the Ph.D. in Higher Education, or the Ph.D. in another discipline) is preferable for a position, please explain why _____

21. How important to the Community College administrator is the symbolic value of the doctorate compared to the training the doctoral program provides?

- Symbolic value is far more important than the training _____
- Symbolic value is somewhat more important than the training _____
- Symbolic value is equal in importance to the training _____
- Symbolic value is somewhat less important than the training _____
- Symbolic value is far less important than the training _____

22. If one's doctoral degree is in **education**, how important for advancement in Community College administration is it that the degree be from a "regionally-accredited" institution of higher education as opposed to a "non-regionally-accredited institution?"

- Extremely important _____ that degree is from regionally-accredited IHE
- Very important _____ " " " " " " " "
- Somewhat important _____ " " " " " " " "
- Minimally important _____ " " " " " " " "
- Not important _____ " " " " " " " "

23. What is your assessment of the current job market in Community College administration for holders of an appropriate doctorate?

- a. Supply greatly exceeds demand (number of candidates greatly exceeds number of openings) _____
- b. Supply exceeds demand _____
- c. Supply and demand are in reasonable balance _____
- d. Demand exceeds supply _____
- e. Demand greatly exceeds supply _____

24. Could other forms of continuing professional education further the development of community college leaders as effectively as a formal doctoral program?

YES _____ NO _____

► IF YES, please explain: _____

25. Is there a doctoral program in CC administration/leadership within a reasonable commuting distance from your campus? YES ___ NO ___

26. Does the campus that is closest to your CC campus of each of the following institutions offer training in CC administration/leadership?

	<u>YES</u>	<u>NO</u>	<u>I DON'T KNOW</u>
California State University	_____	_____	_____
University of California	_____	_____	_____
Independent accredited IHE	_____	_____	_____
Non-accredited private IHE	_____	_____	_____

27. If the campus nearest your CC campus offers training in CC administration/leadership,
how would you rate the quality of that training?

	<u>Poor</u>	<u>Fair</u>	<u>Good</u>	<u>Very Good</u>	<u>Out- standing</u>	<u>I Don't Know</u>
California State University	_____	_____	_____	_____	_____	_____
University of California	_____	_____	_____	_____	_____	_____
Independent accredited IHE	_____	_____	_____	_____	_____	_____
Non-accredited private IHE	_____	_____	_____	_____	_____	_____

Please provide the Inventory of Administrative Positions requested on the next page.

**Thank you for taking the time to give your views on the important topic of
leadership in the community colleges.**

INVENTORY OF ADMINISTRATIVE POSITIONS

- A. In your campus administration, which positions are currently held by persons with a doctorate?

Please include all vice-presidents, deans, associate superintendents, assistant superintendents, and directors (where directors hold positions that usually have a vice-president, dean, or assistant or associate superintendent title).

<u>Administrative Position in which the Current Incumbent Holds a Doctorate</u>	<u>Type of Doctorate (Ed.D., Ph.D., etc.)</u>	<u>Discipline of Doctorate</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

- B. In your campus administration, which positions are currently held by persons without a doctorate?

Please include all vice-presidents, deans, associate superintendents, assistant superintendents, and directors (where directors hold positions that usually have a vice-president, dean, or assistant or associate superintendent title).

Administrative Positions in which the Current Incumbent does NOT Hold a Doctorate

CALIFORNIA POSTSECONDARY EDUCATION COMMISSION

Questionnaire for Deans of CSU Schools of Education

The California Postsecondary Education Commission is conducting this survey as part of a study of the doctorate in education pursuant to AB 1279 (Scott, 1999). Please return the completed survey in the enclosed envelope to the Commission as soon as possible. Thank you for your cooperation. Please check () all "Yes" or "No" questions.

- **Institution:** _____
- **Name of Dean or other identified head administrator of advanced degree programs in education who is being asked to complete this questionnaire:**

1. **Currently, about 48% of superintendents and 8% of principals in the California public schools have doctorates.**

On a scale from 1 to 5, does California need more persons possessing a doctorate in the positions of superintendent and principal?

Need for More Doctorates in Position

<u>Know</u> <u>Position</u>	<u>No</u> <u>Need</u> <u>For More</u>					<u>Very</u> <u>Great</u> <u>Need</u> <u>For More</u>	<u>Do</u> <u>Not</u>
	1	2	3	4	5		
Superintendent	☐	☐	☐	☐	☐	☐	☐
Principal	☐	☐	☐	☐	☐	☐	☐

If you think California needs more superintendents and/or principals with doctorates, please outline your reasons including the types of doctorates (Ed.D., Ph.D., other) and the areas of specialization that are preferable:

Superintendent: _____

Principal:

2. On a scale from 1 to 5, how important is it to increase the number of persons employed in the public schools who hold doctorates in the following areas of specialization?

Importance of Increasing Doctorates

Not Know	Not <u>Important</u>			Extremely Do <u>Important</u>		
	1	2	3	4	5	
<u>Specialization</u>						
Adult & Continuing Education	☐	☐	☐	☐	☐	☐
Curriculum & Instruction	☐	☐	☐	☐	☐	☐
Counseling & Guidance	☐	☐	☐	☐	☐	☐
Education Psychology (research and Evaluation)	☐	☐	☐	☐	☐	☐
Education Administration/Leadership	☐	☐	☐	☐	☐	☐
School Psychology	☐	☐	☐	☐	☐	☐
Social or Philosophical Foundations	☐	☐	☐	☐	☐	☐
Special Education	☐	☐	☐	☐	☐	☐
Teaching Fields (specific academic or technical subjects)	☐	☐	☐	☐	☐	☐
Other (specify) _____	☐	☐	☐	☐	☐	☐
Other (specify) _____	☐	☐	☐	☐	☐	☐

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There is no text or other markings on the paper.

- diversity

 - _____ Broad perspective on education in history and society
 - _____ Broad theoretical knowledge in the social sciences
 - _____ Capacity to provide leadership in an organization characterized by
 - _____ Change-agent skills
 - _____ Clinical practice involving field-based problem solving
 - _____ Communication skills
 - _____ Completion of a discipline-based dissertation
 - _____ Completion of a dissertation addressing a practical problem
 - _____ Data and statistical analysis skills
 - _____ Knowledge of research methods
 - _____ Knowledge of organizational theory and related research
 - _____ Knowledge of politics of education and related research
 - _____ Knowledge of school finance and related research
 - _____ Knowledge of instructional methods and related research
 - _____ Knowledge of the ethical dimensions of schooling
 - _____ Leadership skills

- ☐ Professional contacts and networks
☐ Self-confidence
☐ Other (please describe) _____
☐ Other (please describe) _____

4. Is your institution participating with another IHE in a joint-doctoral program in education?

YES ☐ NO ☐ → IF NO, go to question # 5.

IF YES, please provide the information requested in sections (a), (b), and (c) regarding your joint-doctoral program in education.

(a) Status of Current Program

doctorates awarded 00	Specialization(s)	Partner Institution	Number of		
	of the joint-doctor-	in the joint-doctoral	Enrollment		
	al program	program	1999-2000	98-99	99-

(b) Applications

- How many applications did you receive for admission to your joint-doctoral program?

Joint-doctoral Specialization	Number of Applications to Program				
	Year in which Applications Received				
	95-96	96-97	97-98	98-99	99-00

(c) Capacity

- Assuming no additions to your current faculty, approximately how many (if any) additional doctoral students (compared to 1999-2000 enrollment) could your school accommodate in the joint-doctoral program without loss of quality?

Area(s) of Specialization	Number of additional students that could be accommodated in your school

_____	_____
_____	_____
_____	_____

5. Would you like to see the creation of new joint-doctoral programs in education involving your institution and a doctorate-granting institution?

YES ☒ NO ☐

IF YES, to which area(s) of specialization would you give priority in establishing new joint-doctoral programs?

Priority of Specializations For NEW Joint-Doctoral Program

<u>Area of Specialization</u>	<u>Top Priority</u>	<u>Secondary Priority</u>
	(Check one or other for each specialization)	
Adult & Continuing Edc.	_____	_____
Community College Administration	_____	_____
Curriculum & Instruction	_____	_____
Counseling & Guidance	_____	_____
Educational Administration/Leadership	_____	_____
Education Psychology	_____	_____
Higher Education generally	_____	_____
School Psychology	_____	_____
Social or Philosophical	_____	_____
Foundations of Education	_____	_____
Special Education	_____	_____
Teaching Fields (specific academic & technical subjects)	_____	_____
Other (specify) _____	_____	_____

CALIFORNIA POSTSECONDARY EDUCATION COMMISSION

Survey of Deans of Graduate Programs in Education Form IHE

The California Postsecondary Education Commission is conducting this survey as part of a study of the doctorate in education pursuant to AB 1279 (Scott, 1999). Please return the completed survey in the enclosed envelope to the Commission as soon as possible. Thank you for your cooperation. Please check () all "Yes" or "No" questions.

- Institution: _____
- Name of Dean or other identified head administrator of advanced degree programs in education who is being asked to complete this questionnaire: _____

1. Does your institution award a doctorate in education? YES ____ NO ____

IF NO, please answer the following two questions and then return this survey to CPEC in the enclosed envelope.

- Do you have plans to award doctoral degrees in education in the future? YES ____ NO ____
- IF YES, please give us an idea of your plans:

Area of Specialization In Education	Will You Award Ed.D. or Ph.D. or Both	Year to Start Doctoral Program	Expected Enrollment
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

2. Does your institution award Ed.D.s and/or Ph.D.s in education?

- (1) Ed.D.s only
- (2) Ph.D.s only
- (3) Ed.D.s and Ph.D.s

Check One

3. Does your institution award any types of doctorates in education other than the Ph.D. and/or Ed.D.? YES ____ NO ____

IF YES, What other types of doctorates and in what areas of specialization?

Type: _____ Specialization: _____
Type: _____ Specialization: _____
Type: _____ Specialization: _____

4. If your institution awards **both** Ph.D.s and Ed.D.s in education, please answer questions **a** to **g.**, and then go to question # 5.

• **Are there significant differences between the Ph.D. and the Ed.D. programs in:**

- a. Admission standards for each program? YES ____ NO ____ **IF YES**, please describe the differences: _____

- b. Course requirements for each program? YES ____ NO ____ **IF YES**, please describe the differences: _____

- c. Unit requirements for each program? YES ____ NO ____ **IF YES**, please describe the differences: _____

- d. Nature of the dissertation for each program? YES ____ NO ____ **IF YES**, please describe the differences: _____

- e. Expectations regarding full-time study for each program? YES ____ NO ____ **IF YES**, please describe the differences: _____

- f. Availability of courses on weekends for each programs? YES ____ NO ____ **IF YES**, please describe the differences: _____

- g. Other significant differences between the programs? Please describe: _____

Program Capacity and Expansion

5. Assuming no additions to your current faculty, could your school accommodate additional doctoral students (compared to the 1999-2000 enrollment) without loss of quality?

YES **NO**

- In Education Administration/Leadership
(if you offer Ed. Admin/Leadership)
- In any of the other specializations

6. **IF YOU ANSWERED YES IN QUESTION 5**, how many additional students could you accommodate in:

Number of Additional Students

- Education Administration/Leadership
- Other Specializations—Please Specify

7. **IF YOU ANSWERED YES IN QUESTION 5**, is your institution seeking to increase enrollment in doctoral programs in 2000-2001 (compared to 1999-2000) in:

Number of Additional Students Sought

- Education Administration/Leadership
- Other Specializations—Please Specify

8. At this time, do you have any definite plans for the next several years to increase the capacity (by adding faculty or by other means) of your institution to enroll doctoral students? YES _____ NO _____

IF YES, how much do you plan to expand capacity in:

Number of additional students

- Education Administration/Leadership
- Other Specializations—Please Specify

Your Institution's Doctoral Program in Education Administration/Leadership

NOTE: If your institution does not offer a Doctoral Program in Education Administration/Leadership, please proceed to Question # 11 .

9. What are the most important skills, abilities, knowledge, and experiences that are imparted in the doctoral program in Education Administration/Leadership at your institution? **Please place a check mark by the FIVE most important:**

- ☐ Broad perspective on education in history and society
- ☐ Broad theoretical knowledge in the social sciences
- ☐ Capacity to provide leadership in an organization characterized by diversity
- ☐ Change-agent skills
- ☐ Clinical practice involving field-based problem solving

- ☐ Communication skills
- ☐ Completion of a discipline-based dissertation
- ☐ Completion of a dissertation addressing a practical problem
- ☐ Data and statistical analysis skills
- ☐ Knowledge of research methods

- ☐ Knowledge of organizational theory and related research
- ☐ Knowledge of politics of education and related research
- ☐ Knowledge of school finance and related research
- ☐ Knowledge of instructional methods and related research
- ☐ Knowledge of the ethical dimensions of schooling

- ☐ Leadership skills
- ☐ Professional contacts and networks
- ☐ Self-confidence
- ☐ Other (please describe) _____
- ☐ Other (please describe) _____

10. How many years of coursework (assuming full-time enrollment) is typically required of a person who has a Tier II Administrative Services Credential to attain a doctorate in Education Administration/Leadership at your institution?

- To attain an Ed.D.: _____ years
- To attain a Ph.D.: _____ years

Need for More Doctorates in Education

11. Currently, about 48% of superintendents and 8% of principals in the California public schools have doctorates. On a scale from 1 to 5, does California need more persons possessing a doctorate in the positions of superintendent and/or principal?

Need for More Doctorates in Position

<u>Position</u>	No Need <u>For More</u>				Very Great Need <u>For More</u>	Do Not <u>Know</u>
	1	2	3	4	5	
Superintendent	☐	☐	☐	☐	☐	☐
Principal	☐	☐	☐	☐	☐	☐

If you think California needs more superintendents and/or principals with doctorates, please outline your reasons, including the types of doctorate (Ed.D., Ph.D., other) and the areas of specialization that are preferable:

Superintendent: _____

Principal: _____

12. On a scale from 1 to 5, how important is it to increase the number of persons employed in the public schools who hold doctorates in the following areas of specialization?

Importance of Increasing Doctorates

<u>Specialization</u>	Not Important				Extremely Important	Do Not Know
	1	2	3	4	5	
Adult & Continuing Education	☐	☐	☐	☐	☐	☐
Curriculum & Instruction	☐	☐	☐	☐	☐	☐
Counseling & Guidance	☐	☐	☐	☐	☐	☐
Education Psychology (research and evaluation)	☐	☐	☐	☐	☐	☐
Education Administration/Leadership	☐	☐	☐	☐	☐	☐
School Psychology	☐	☐	☐	☐	☐	☐

Importance of Increasing Doctorates

<u>Specialization</u>	<u>Not Important</u>			<u>Extremely Important</u>		<u>Do Not Know</u>
	1	2	3	4	5	
Social or Philosophical Foundations	☐	☐	☐	☐	☐	☐
Special Education	☐	☐	☐	☐	☐	☐
Teaching Fields (specific academic or technical subjects)	☐	☐	☐	☐	☐	☐
Other (specify) _____	☐	☐	☐	☐	☐	☐
Other (specify) _____	☐	☐	☐	☐	☐	☐

For those specializations which you think it is most important that we increase the number of doctorates employed in the public schools, please give your reasons: _____

Questions About Preparation of Community College Administrators

13. Do you have any students currently enrolled in your doctoral programs in education who are specializing in Community College administration? YES ____ NO ____

IF YES, how many are seeking:

- An Ed. D. _____
- A Ph.D. _____

14. Has your institution awarded any doctorates during the last five years to students who specialized in Community College administration? YES ____ NO ____

IF YES, during the last five years, how many Ed.D.s and Ph.D.s have you awarded to students who specialized in community college administration?

- Number of Ed.D.s _____
- Number of Ph.D.s _____

15. Are any students who have received a doctorate in education from your institution in any specializations during the last three years now working for a community college district as an administrator? YES ____ NO ____ I DON'T KNOW ____

IF YES,  how many such students work in the community colleges as an administrator? _____

Statistical Information

16. If you offer a doctoral program in Education Administration/Leadership, how many applications for admission to that doctoral program did you receive in each of the following years?

Number of Applications for Admission To the Doctorate in Education Administration/Leadership Program Received	
<u>Year</u>	
1990-91	_____
1995-96	_____
1996-97	_____
1997-98	_____

Please provide the data requested on the following two pages which concern the 1998-1999 and 1999-2000 years.

Please give a contact person for the statistical information:

Name: _____
Phone number: _____

Thank you for your assistance in this important study affecting all segments of education.

**1998-1999
EDUCATION DOCTORAL PROGRAM**

**Within Each Specialization
Excluding Joint-Doctoral Programs
Joint-Doctoral Programs**

(Programs in which you partner with another IHE)

Specialization Enrolled	Program	Ed.D	Ph.D.	Other	Program	Ed.D	Ph.D.	Other	Program	Program
Education Administration/Leadership										
Curriculum & Instruction										
Education Psychology										
Social/Philosophical Foundations										
School Psychology										
Special Education										
Counseling & Guidance										
Higher Education										
Adult & Continuing Ed.										
Teaching Fields (specific academic & technical subjects)										
Other										

Other _____

**1999-2000
EDUCATION DOCTORAL PROGRAM**

**Within Each Specialization
Excluding Joint-Doctoral Programs
Joint-Doctoral Programs**

which you partner with another IHE)

(Programs in

Specialization Enrolled	Program	Number of Applications Received Total During 1999-00	Number of Students Admitted in 1999-00	Number of Students Admitted in 1999-00	Total Enrollment in the Doctoral Program	Number of Doctorates Awarded in 1999-2000			Number of Applications Received During 1999-00	Number of Students Admitted in 1999-00
		Ed.D	Ph.D.	Other	Who Enrolled	Ed.D	Ph.D.	Other	to enter in the Doctoral Program	to the Doctoral Program
Education Administra- tion/Leadership										
Curriculum & Instruction										
Education Psychology										
Social/Philosophical Foundations										
School Psychology										
Special Education										
Counseling & Guidance										
Higher Education										
Adult & Continuing Ed.										
Teaching Fields (specific academic & technical subjects)										

CALIFORNIA POSTSECONDARY EDUCATION COMMISSION

Survey of Public School Superintendents

The California Postsecondary Education Commission is conducting this survey as part of a study of the doctorate in education pursuant to AB 1279 (Scott, 1999). Responses will be kept confidential and will be reported only in aggregate form. Please return the completed survey in the enclosed envelope to the Commission as soon as possible. Please check () all "Yes" or "No" questions. Thank you for your cooperation. School District _____
Superintendent _____

1. How many years have you been a superintendent, including all districts in which you have been superintendent? _____ years.
2. What is your gender? Male _____ Female _____
3. Which of the following best describes you? (check one)
African American _____ Asian/Asian American _____
American Indian/Alaskan _____ Filipino _____
Hispanic/Latino/Chicano _____ Pacific Islander _____
White (non-Hispanic) _____ Other _____
4. Do you have an earned doctorate? YES _____ NO _____

IF NO, please go to Question # 13

QUESTIONS FOR RESPONDENTS WITH A DOCTORATE

5. What type of doctorate do you have and what was your specialization?
Ed.D _____ Doctoral specialization _____
Ph.D. in Education _____ Doctoral specialization _____
Ph.D. in another discipline _____ Discipline _____
6. From which institution did you receive your doctorate? _____
7. In what year did you receive your doctorate? _____
8. How many years after you received your bachelor degree did you receive your doctoral degree? _____
9. From the time you entered your doctoral program, how long did it take to complete your doctoral degree? _____
10. While earning your doctorate, how much of that time were you
(a) a full-time student? _____ years or _____ months
(b) employed as a public school teacher? _____ years or _____ months
(c) employed as a public school administrator? _____ years or _____ months

11. How important was possession of the doctorate in securing your current position?

Essential _____ Very helpful _____
 Somewhat helpful _____ Minimally helpful _____
 Not a factor _____ Did not have doctorate when appointed _____

12. On a scale from 1 to 5, how important to you was each of the following reasons for attaining your doctorate?

Reason for Attaining Doctorate	Not Important At All				Very Important
	1	2	3	4	5
Job advancement and promotion	☐	☐	☐	☐	☐
Intellectual growth	☐	☐	☐	☐	☐
Acquire organizational & leadership skills	☐	☐	☐	☐	☐
Career field change	☐	☐	☐	☐	☐
Salary Increases	☐	☐	☐	☐	☐
Societal or community expectations	☐	☐	☐	☐	☐
Satisfaction of having doctorate	☐	☐	☐	☐	☐
Other (specify) _____	☐	☐	☐	☐	☐

GO TO QUESTION # 16 ON PAGE 4

QUESTIONS FOR RESPONDENTS WITHOUT A DOCTORATE

13. Are you **currently enrolled** in a doctoral program in education? YES _____
 NO _____ **IF NO, go To Question 14.**

IF YES, on a scale from 1 to 5, how important was each of the following reasons in your decision to enroll?

Reason for Enrolling	Not Important At All				Very Important
	1	2	3	4	5
Job advancement and promotion	☐	☐	☐	☐	☐
Intellectual growth	☐	☐	☐	☐	☐
Acquire organizational & leadership skills	☐	☐	☐	☐	☐
Career field change	☐	☐	☐	☐	☐
Salary Increases	☐	☐	☐	☐	☐

	1	2	3	4	5
Societal or community expectations	☐	☐	☐	☐	☐
Satisfaction of having doctorate	☐	☐	☐	☐	☐
Other (specify) _____	☐	☐	☐	☐	☐

GO TO QUESTION # 16 ON PAGE 4

14. Are you **planning to enroll** in a doctoral program in education in the next five years?
 YES _____ NO _____ → IF NO, go to Question 15.

▼
 IF YES, on scale from 1 to 5, how important is each of the following reasons for your plans to enroll?

<u>Reason for Planning to Enroll</u>	<u>Not Important At All</u>				<u>Very Important</u>
	1	2	3	4	5
Job advancement and promotion	☐	☐	☐	☐	☐
Intellectual growth	☐	☐	☐	☐	☐
Acquire organizational & leadership skills	☐	☐	☐	☐	☐
Career field change	☐	☐	☐	☐	☐
Salary Increases	☐	☐	☐	☐	☐
Societal or community expectations	☐	☐	☐	☐	☐
Satisfaction of having doctorate	☐	☐	☐	☐	☐
Other (specify) _____	☐	☐	☐	☐	☐

GO TO QUESTION # 16 ON PAGE 4

15. If you are **not currently enrolled** or **not currently planning to enroll** in a doctoral program in education, how important is each of the following reasons in your thinking?

<u>Reason for Not Pursuing Doctorate</u>	<u>Not Important At All</u>				<u>Very Important</u>
	1	2	3	4	5
Have felt no need of a doctorate	☐	☐	☐	☐	☐
No programs in reasonable proximity	☐	☐	☐	☐	☐
Family obligations interfere	☐	☐	☐	☐	☐
Can't afford the time	☐	☐	☐	☐	☐
Can't afford the costs	☐	☐	☐	☐	☐
Other (specify) _____	☐	☐	☐	☐	☐

16. Does your school district provide its superintendent a salary "bonus" if he or she possesses a doctorate? YES _____ NO _____

IF YES, how much is the bonus this year? \$ _____

17. Does your school district have any programs to encourage or support an employee of the district in obtaining a doctorate? YES _____ NO _____

IF YES, please describe such program(s) _____

18. What are the most important skills, abilities, knowledge, and experiences that a doctoral program in Education Administration/Leadership **SHOULD** provide?

Please place a check mark by the FIVE most important:

- ____ Broad perspective on education in history and society
- ____ Broad theoretical knowledge in the social sciences
- ____ Capacity to provide leadership in an organization characterized by diversity
- ____ Change-agent skills
- ____ Clinical practice involving field-based problem solving
- ____ Communication skills
- ____ Completion of a discipline-based dissertation
- ____ Completion of a dissertation addressing a practical problem
- ____ Data and statistical analysis skills
- ____ Knowledge of research methods
- ____ Knowledge of organizational theory and related research
- ____ Knowledge of politics of education and related research
- ____ Knowledge of school finance and related research
- ____ Knowledge of instructional methods and related research
- ____ Leadership skills
- ____ Professional contacts and networks
- ____ Self-confidence
- ____ Understanding of the ethical dimensions of schooling
- ____ Other (please describe) _____
- ____ Other (please describe) _____

19. In terms of ability to do a good job as a **Superintendent**, a **High School Principal**, and an **Elementary School Principal**, how important is it that the person have a doctorate in Education Administration/Leadership?

	Not Important <u>At All</u>			Very Important	
	1	2	3	4	5
Superintendent	☐	☐	☐	☐	☐
High School Principal	☐	☐	☐	☐	☐
Elementary School Principal	☐	☐	☐	☐	☐

20. How important to the public school administrator is the symbolic value of the doctorate in education compared to the training the doctoral program provides?

- Symbolic value is far more important than the training _____
- Symbolic value is somewhat more important than the training _____
- Symbolic value is equal in importance to the training _____
- Symbolic value is somewhat less important than the training _____
- Symbolic value is far less important than the training _____

21. If one's doctoral degree is in education, does it matter for advancement in public school administration whether the degree is a Ph.D. or an Ed.D?

YES _____ NO _____

IF YES, which degree is preferable and why? _____

22. If one's doctoral degree is in education, how important for advancement in public school administration is it that the degree be from a regionally-accredited institution of higher education as opposed to one that is not regionally accredited.

check one

Extremely _____ important	that it be from a regionally-accredited institution
Very _____ important	" " " " " " " " " "
Somewhat _____ important	" " " " " " " " " "
Minimally _____ important	" " " " " " " " " "
Not _____ important	" " " " " " " " " "

23. On a scale from 1 to 5, how important is it that a person in the following positions or roles in a public school district possess a doctorate in education?

	Not Important At All				Very Important
Position or role	1	2	3	4	5
Deputy Superintendent	☐	☐	☐	☐	☐
Associate Superintendent	☐	☐	☐	☐	☐
Head of Bilingual Education	☐	☐	☐	☐	☐
Head of Compensatory Education	☐	☐	☐	☐	☐
Head of Curriculum & Instruction	☐	☐	☐	☐	☐
Head of Finance/business	☐	☐	☐	☐	☐
Head of Personnel	☐	☐	☐	☐	☐
Head of Pupil Personnel Services	☐	☐	☐	☐	☐
Head of Research & Evaluation	☐	☐	☐	☐	☐
Head of Special Education	☐	☐	☐	☐	☐
Head of Staff Development	☐	☐	☐	☐	☐

24. Currently, about 48% of superintendents and 8% of principals in the California public schools have doctorates. On a scale from 1 to 5, does California need more persons possessing a doctorate in education in the positions of superintendent and principal?

	No Need For More				Very Great Need For More	Do Not Know
Position	1	2	3	4	5	
Superintendent	☐	☐	☐	☐	☐	☐
Principal	☐	☐	☐	☐	☐	☐

If you think we need more doctorates in either of these positions, please tell us why, including the types of doctorate (Ed.D., Ph.D., other) and the areas of specialization that are preferable:

Superintendent:

Principal:

25. Are there any professional development programs for principals that provide training as beneficial as a doctoral program in Education Administration/Leadership?

YES ☐ NO ☐

IF YES, please identify such program(s): _____

Appendix M Members of the Advisory Committee

Assembly Bill 1279 called for the Commission to form an advisory committee to assist in its study of the production and utilization of education doctorates in California.

The Committee held its first meeting on April 11, at which time the preliminary study design, potential survey instruments and work plan for the study were reviewed. The committee met again on September 12 for the purpose of reviewing the entire study, including conclusions, options and recommendations. The following members represented their respective agencies or organizations. Not all participants attended both meetings.

University of California

Julius Zelmanowitz, Interim Vice Provost, Academic Initiatives, Office of the President
M.R.C. Greenwood, Chancellor, UC Santa Cruz
Raymond Orbach, Chancellor, UC Riverside
Bob Calfee, Dean, School of Education, UC Riverside
Todd Greenspan, Coordinator, Education Relations, Office of the President
Ami Zusman, Coordinator, Graduate Education, Office of the President

California State University

David Spence, Executive Vice Chancellor, Office of the Chancellor
Robert L. Caret, President, San Jose State University
Paul Shaker, Dean of Education, CSU Fresno

California Community Colleges

Victoria Morrow, Vice Chancellor
Jose Michel, Dean, Curriculum Standards and Instructional Services

Association of Independent California Colleges and Universities

Jonathan Brown, President
Ann Hart, Provost, Claremont Graduate University
Beth Benedetti, Research Analyst

California School Boards Association

Lucy Okumu, Consultant

Association of California School Administrators

Rex Fortune, Superintendent, Center Unified School District

Office of the Secretary of Education

Jenny Kao, Analyst

California County Superintendents Educational Services Association

Glenn Thomas, Executive Director

Bureau for Private Postsecondary and Vocational Education

Betty Sundberg, Consultant

Commission on Teacher Credentialing

Larry Birch, Administrator, Professional Services Division

Appendix N Text of Assembly Bill 1279

Assembly Bill No. 1279

CHAPTER 337

An act relating to postsecondary education, and declaring the urgency thereof, to take effect immediately.

[Approved by Governor September 7, 1999. Filed
with Secretary of State September 7, 1999.]

LEGISLATIVE COUNSEL'S DIGEST

AB 1279, Scott. Postsecondary education: study of doctoral education.

Existing law establishes the various segments of the higher education system in the state. These segments include the University of California, which is administered by the Regents of the University of California, the California State University, which is administered by the Trustees of the California State University, the California Community Colleges, which are administered by the Board of Governors of the California Community Colleges, and various private and independent colleges and universities. Existing law establishes the California Postsecondary Education Commission as an entity responsible for coordinating public, independent, and private postsecondary education in California and providing independent policy analysis and recommendations to the Legislature and the Governor on postsecondary education issues.

This bill would require the California Postsecondary Education Commission to conduct a study to determine the current capacity for applied joint doctorates in the state, as specified. The bill would require the commission to complete and transmit copies of the study to the Governor and to the appropriate education policy and fiscal committees of the Legislature on or before June 30, 2000.

The bill would declare that it is to take effect immediately as an urgency statute.

The people of the State of California do enact as follows:

SECTION 1. The Legislature finds and declares all of the following:

(a) The increasing complexity of the tasks of the California work force and the need for increased intellectual competencies in workers creates a context where postbaccalaureate learning and economic prosperity are inextricably connected.

(b) Applied doctorate programs bridge the duality between abstract, theoretical, and intellectual work and the practical requirements of everyday work and employment. These programs

construct important connections among communities, employers, and academia.

(c) Where the demand for doctoral education is significant and opportunities for collaboration within California are limited, it may be possible for California public colleges and universities to develop more applied joint doctoral programs to meet the increasing needs of the state's work force.

(d) These potential collaborations between in-state and out-of-state institutions may capitalize on complementary resources, unusual specializations, and existing scholarly ties.

(e) The opportunity to leverage expertise may present an excellent opportunity to enhance the education and professional qualifications of California's students and, ultimately, its work force.

SEC. 2. (a) The California Postsecondary Education Commission shall conduct a study to determine the current capacity for applied joint doctorates in the state. The study shall specifically focus on whether the state is meeting its needs for applied joint doctorates with its current applied joint doctoral programs.

(b) While developing the study pursuant to this section, the commission shall consult with all segments of higher education, including approved degree-granting institutions, representatives from business, industry, and professional communities, officials from state and local governments, and representatives from local educational agencies, with the intent to qualify and quantify the value and merit of applied joint doctoral programs to present and future work force needs.

(c) Notwithstanding Section 7550.5 of the Government Code, on or before June 30, 2000, the commission shall complete the study conducted pursuant to this section and transmit copies of the study to the Governor and to the appropriate education policy and fiscal committees of the Legislature.

SEC. 3. This act is an urgency statute necessary for the immediate preservation of the public peace, health, or safety within the meaning of Article IV of the Constitution and shall go into immediate effect. The facts constituting the necessity are:

In order for the important study required by Section 2 of this act to be conducted in a timely manner, it is necessary that this act take effect immediately.

CALIFORNIA POSTSECONDARY EDUCATION COMMISSION

THE California Postsecondary Education Commission is a citizen board established in 1974 by the Legislature and Governor to coordinate the efforts of California's colleges and universities and to provide independent, non-partisan policy analysis and recommendations to the Governor and Legislature.

Members of the Commission

The Commission consists of 16 members. Nine represent the general public, with three each appointed for six-year terms by the Governor, the Senate Rules Committee, and the Speaker of the Assembly. Five others represent the major segments of postsecondary education in California. Two student members are appointed by the Governor.

As of November 2000, the Commissioners representing the general public are:

Guillermo Rodriguez, Jr., San Francisco; Chair
Alan S. Arkatov, Los Angeles; Vice Chair
Carol Chandler, Fowler
Lance Izumi, San Francisco
Kyo "Paul" Jhin, Malibu
Evonne Schulze, San Diego
Howard Welinsky, Culver City
Melinda G. Wilson, Torrance
Vacant

Representatives of the segments are:

Kyhl Smeby, Pasadena; appointed by the Governor to represent the Association of Independent California Colleges and Universities;

Phillip J. Forhan, Fresno; appointed by the Board of Governors of the California Community Colleges;

Monica Lozano, Los Angeles; appointed by the California State Board of Education;

Ralph Pesqueira, San Diego; appointed by the Trustees of the California State University; and

Velma Montoya, Los Angeles; appointed by the Regents of the University of California.

The two student representatives are:

Robert A. Hanff, Northridge
Vacant

Functions of the Commission

The Commission is charged by the Legislature and Governor to "assure the effective utilization of public postsecondary education resources, thereby eliminating waste and unnecessary duplication, and to promote diversity, innovation, and responsiveness to student and societal needs."

To this end, the Commission conducts independent reviews of matters affecting the 2,600 institutions of postsecondary education in California, including community colleges, four-year colleges, universities, and professional and occupational schools.

As an advisory body to the Legislature and Governor, the Commission does not govern or administer any institutions, nor does it approve, authorize, or accredit any of them. Instead, it performs its specific duties of planning, evaluation, and coordination by cooperating with other State agencies and non-governmental groups that perform those other governing, administrative, and assessment functions.

Operation of the Commission

The Commission holds regular meetings throughout the year at which it discusses and takes action on staff studies and takes positions on proposed legislation affecting education beyond the high school in California. By law, its meetings are open to the public. Requests to speak at a meeting may be made by writing the Commission in advance or by submitting a request before the start of the meeting.

The Commission's day-to-day work is carried out by its staff in Sacramento, under the guidance of Executive Director Warren Halsey Fox, Ph.D., who is appointed by the Commission.

Further information about the Commission and its publications may be obtained from the Commission offices at 1303 J Street, Suite 500, Sacramento, California 95814-2938; telephone (916) 445-7933; web site www.cpec.ca.gov.

The Production and Utilization of Education Doctorates for Administrators in California's Public Schools

Commission Report 00-9



ONE of a series of reports published by the California Postsecondary Education Commission as part of its planning and coordinating responsibilities. Summaries of these reports are available on the Internet at <http://www.cpec.ca.gov>. Single copies may be obtained without charge from the Commission at 1303 J Street, Suite 500, Sacramento, California 95814-2938. Recent reports include:

1999

- 99-1 *Recommendations on Strategies to Enhance the Delivery of Health Care to All Californians: The Commission's Response to Senate Concurrent Resolution 23* (April 1999)
- 99-2 *Opening the Central Valley: A Review of the Board of Regents' Proposal to Build the University of California at Merced* (June 1999)
- 99-3 *A Bridge to the Future: Higher Education Planning for the Next Century* (September 1999)
- 99-4 *Fiscal Profiles, 1999: The Ninth Annual in a Series of Factbooks About the Financing of California Higher Education* (October 1999)
- 99-5 *Student Profiles, 1999: The Latest in a Series of Annual Factbooks About Student Participation in California Higher Education* (December 1999)

2000

- 00-1 *Providing for Progress: California Higher Education Enrollment Demand and Resources into the 21st Century* (February 2000)
 - 00-2 *Performance Indicators of California Higher Education, 1999: The Sixth Annual Report to California's Governor, Legislature, and Citizens in Response to Assembly Bill 1808 (Chapter 741, Statutes of 1991)* (February 2000)
 - 00-3 *Policy for Progress: Reaffirming California Higher Education Accessibility, Affordability, and Accountability into the 21st Century* (April 2000)
 - 00-4 *The Condition of Higher Education in California, 2000* (April 2000)
 - 00-5 *Moving California Ahead: An Executive Summary* (June 2000)
 - 00-6 *A Mission to Teach -- The California State University, Channel Islands: A Review of the Board of Trustees' Proposal to Build a 23rd Campus* (November 2000)
 - 00-7 *Fiscal Profiles, 2000: The Tenth Annual in a Series of Factbooks About the Financing of California Higher Education* (November 2000)
 - 00-8 *Student Profiles, 2000: The Latest in a Series of Annual Factbooks About Student Participation in California Higher Education* (November 2000)
 - 00-9 *The Production and Utilization of Education Doctorates for Administrators in California's Public Schools: A Report in Response to Assembly Bill 1279* (December 2000)
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